

# Unintended Consequences:

The Folly of  
Uncritical Thinking



Edited by

Vicente B. Paqueo | Aniceto C. Orbeta Jr. | Gilberto M. Llanto



Philippine Institute for Development Studies  
Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas

**Unintended Consequences: The Folly of Uncritical Thinking** underscores the importance of grounding proposals for public policy on rigorous analysis supported by empirical evidence. Drawing on a number of live issues animating the national policy scene, the book shows how well-intentioned actions by the state may lead to outcomes that disadvantage precisely the people intended to benefit from them. This happens, the book argues, because attempts to introduce new programs or undo existing ones are often driven by short-term considerations, carelessly overlook the effects of such actions on people's motivations and behaviors, or conveniently ignore available information. Overestimating the administrative capacity of the bureaucracy is also a common cause of ill-conceived and poorly designed programs that prove counterproductive.

This book is recommended for anyone—student or professional—with a serious interest in public policy. More than a compendium of case studies, it is a plea for greater circumspection among those who are responsible for crafting, proposing, or approving laws, regulations, and special programs in the pursuit of some noble social objectives. This book is a timely antidote to the creeping anti-intellectualism in our midst that favors a style of decisionmaking based on bravado or strongly held priors without the benefit of evidence and rigorous study.

*Emmanuel F. Esguerra*  
*Professor, University of the Philippines*  
*School of Economics*

“The value of this book goes beyond expounding on the unintended and adverse consequences of illustrative policy solutions to 10 issues confronting the nation. Apart from hypothesizing some of the factors behind unintended consequences... [the book] stimulates further multidisciplinary theorizing on the politics of policymaking. More importantly, the book highlights the urgent need for critical thinking and suggests how we might begin to arrive at evidence-based decisions in a far from perfect political environment.”

*Maria Cynthia Rose E. Bautista  
Professor of Sociology  
University of the Philippines*

“If ever there was case to be made for the use of rigorous evidence in policymaking and program design, this book does it. It’s a great reference for all who are keen to ensure that decisions about development are based on what works to improve people’s well-being. I’d put it on any must-read list for policy analysts and policymakers alike in the Philippines.”

*Emmanuel Jimenez  
Executive Director of the International Initiative  
for Impact Evaluation*

“In the policy gridlock of the ‘post-factual world’, evidence-based discussion and debate are even more critical to help the country find middle ground toward sustained policy reform. This book will be useful not just for students—but more so for politicians, businesspeople, and the media.”

*Ronald U. Mendoza  
Dean of the Ateneo School of Government*

“[The book is] a weapon against toxic policies masquerading as populist solutions... Whether the topic is labor contractualization, food security, minimum wages... or other headline-making issues, the authors apply cold logic and data to expose the fallacies behind superficial, but politically popular, solutions... The nation needs more books like this.”

*Calixto V. Chikiamco  
Political Economist, Entrepreneur,  
and President of Foundation for Economic Freedom*

*Unintended  
Consequences:*  
The Folly of  
Uncritical Thinking



# *Unintended Consequences:* The Folly of Uncritical Thinking

Edited by

**Vicente B. Paqueo | Aniceto C. Orbeta Jr. | Gilberto M. Llanto**



**Philippine Institute for Development Studies**

*Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas*

Copyright 2017

Published by  
Philippine Institute for Development Studies

Printed in the Philippines. Some rights reserved.

The views expressed in this paper are those of the authors and do not necessarily reflect the views of any individual or organization.

Please address all inquiries to:

Philippine Institute for Development Studies  
18th Floor, Three Cyberpod Centris - North Tower  
EDSA corner Quezon Avenue, 1100 Quezon City  
Telephone: (63-2) 877-4000; 372-1291 to 92  
Fax: (63-2) 877-4099  
E-mail: [publications@mail.pids.gov.ph](mailto:publications@mail.pids.gov.ph)  
Website: <http://www.pids.gov.ph>

This book is under the Creative Commons Attribution Noncommercial License. It shall not be used for commercial purposes. Anyone can use, reuse, distribute, and build upon this material as long as proper attribution is made.

ISBN 978-971-564-066-4  
ISBN 978-971-564-067-1 (electronic)  
RP 03-17-600

*Dí ko inaasahang paniwalaan ako alang-alang lamang sa aking sabi: maraming taong dí natingin sa katuiran at tunay... ñguni't ang hiling ko'y magisip, mag mulaymulay ang lahat, usigin at salain kung sakalí sa ngalan ng katuiran.*

**Dr. Jose Rizal, 1889**





*In memory of*  
*Dr. Jose Encarnacion Jr.*  
*national scientist, economist, and mentor*



# Table of Contents

List of Tables, Figures, Boxes, and Appendixes .....	xvi
Foreword .....	xxi
Preface .....	xxiii
Acknowledgment .....	xxv
Introduction by Gerardo P. Sicat .....	xxvii
List of Acronyms .....	xix

## Chapter 1

### **Synthesis of Selected Case Studies of Philippine Policies and Programs ..... 1**

*Vicente B. Paqueo, Aniceto C. Orbeta Jr., Gilberto M. Llanto, and Maribel A. Daño-Luna*

Introduction.....	2
Key findings and lessons learned .....	2
Critical thoughts on uncritical thinking .....	11
Conclusions, reflections, and recommendations.....	18
References.....	20

## Chapter 2

### **Cargo Truck Ban: Bad Timing, Faulty Analysis, Policy Failure ..... 21**

*Gilberto M. Llanto*

Abstract .....	21
“Gates of hell?” .....	22
Doing the math.....	23
The predicate .....	23
Benefit and unintended cost .....	26
Postmortem .....	33
Epilogue .....	35
References.....	36

### **Chapter 3**

#### **The Impact of Legal Minimum Wages on Employment, Income, .....37 and Poverty Incidence in the Philippines**

*Vicente B. Paqueo, Aniceto C. Orbeta Jr., and Leonardo A. Lanzona Jr.*

Abstract .....	37
Introduction .....	38
The minimum wage law and its context .....	41
Conflicting hypotheses about the LMW effects .....	44
Empirical evidence on LMW impact .....	47
Conclusion .....	48
References.....	50

### **Chapter 4**

#### **Trading Off Worker Flexibility for Job Security: .....53 Missed Opportunities for More and Better Jobs**

*Leonardo A. Lanzona Jr. and Vicente B. Paqueo*

Abstract .....	53
MSME challenge to development .....	55
Can MSMEs drive economic growth? .....	57
How is the labor market regulated in the Philippines? .....	59
Using incentives to eliminate effects of regulations .....	63
Summary and conclusion .....	67
References.....	69

### **Chapter 5**

#### **Beware of the “End Contractualization!” Battle Cry .....71**

*Vicente B. Paqueo and Aniceto C. Orbeta Jr.*

Abstract .....	71
The story of three ladies .....	72
Understanding the clamor .....	74
The economic context.....	75
Profile of Filipino workers and the nature of their jobs .....	75
Regularization, endo, and related laws .....	76

Toward a more informed response to the anticontractualization advocacy.....	79
The experience of temps in the Philippines .....	81
Understanding endo and the challenge of ending it.....	83
Conclusions and reflections .....	87
References .....	90

## **Chapter 6**

### **Food (In)security and the Price of Rice Self-Sufficiency .....91**

*Roehlano M. Briones*

Abstract .....	91
Overview .....	92
Background .....	93
How the Philippines stopped importing a lot of rice .....	95
Rice self-sufficiency policy: Hits and misses .....	99
Recommendation .....	100
References .....	100

## **Chapter 7**

### **Beyond the Rent: Studying the Unintended Consequences .....103 of Housing Rent Control Law in Metro Manila**

*Marife M. Ballesteros and Tatum P. Ramos*

Abstract .....	103
Introduction .....	104
Does rent control benefit the poor? The case of Metro Manila .....	105
What if rent control is lifted? .....	111
References .....	116

## **Chapter 8**

### **Planting Seeds of Self-Defeat: Effects of Unrealistic Regulations.....117 on the Caraga Wood Industry and Forest Conservation**

*Vicente B. Paqueo and Danilo C. Israel*

Abstract .....	117
Deforestation: Its impact and underlying causes .....	118

Solving the problem through EO 23 .....	119
How EO 23 affected the Caraga timber industry .....	120
Conclusions .....	125
Reflections.....	126
References .....	128

## **Chapter 9**

### **Reducing the Unintended Consequences of Open Access Fishing: .....129 Lessons from the Zamboanga Experience**

*Danilo C. Israel, Milva Lunod-Carinan, and Vicente B. Paqueo*

Abstract .....	129
Philippine fishing culture and industry .....	130
No more free fish and other reflections.....	142
References .....	143

## **Chapter 10**

### ***Pantawid Pamilyang Pilipino Program: Boon or Bane? .....145***

*Aniceto C. Orbeta Jr. and Vicente B. Paqueo*

Abstract .....	145
Introduction .....	146
Poverty and the challenge of social protection .....	147
The objective and strategy of Pantawid.....	149
Skepticism, criticism, and opposition.....	153
The evidence of Pantawid’s performance.....	155
Conclusion: Summary, reflections, and caveats.....	156
References .....	162

## **Chapter 11**

### **The Irony of RH Law Critics’ Opposition to Comprehensive .....165 Sex Education**

*Michael R.M. Abrigo and Vicente B. Paqueo*

Abstract .....	165
The RH law and sexuality education .....	166

Conservative opposition .....167  
What is the evidence?..... 168  
Who voted for RH bill? .....170  
More evidences .....171  
Conclusion .....173  
References .....175  
  
The Authors .....177



# List of Tables, Figures, Boxes, and Appendixes

## Table

### *Chapter 1*

- 1 Unintended consequences of policies and programs: .....8  
Lessons from the case studies

### *Chapter 2*

- 1 Chronology of the Manila truck ban .....24
- 2 Quantifying the time delay of cargo releasing due to the truck ban .....31
- 3 Economic cost of the seven-month cargo truck ban .....33

### *Chapter 3*

- 1 Comparison of minimum wages across countries .....40
- 2 Current minimum wages in the Philippines (as of March 2016) .....43

### *Chapter 4*

- 1 Breakdown of enterprises in the Philippines .....55
- 2 Number of employees by industry and firm size .....57
- 3 Selected estimates of elasticities of capital expenditures, workers, .....66  
and capital-labor ratio to incentives

### *Chapter 5*

- 1 Distribution of employment by nature of job: Rising share .....76  
of temporary workers
- 2 Average daily earnings of wage and salary workers (in 2006 prices).....77
- 3 Definition of TECs relative to LCP's classification of employees .....78
- 4 Philippine labor market: High labor cost, inflexible, inefficient .....79  
due to restrictive laws
- 5 Survey of 5-5-5 workers, contractors, and principals in Regions XI, X,.....82  
IV-A, and NCR
- 6 How else can endo be ended without impeding expansion of .....87  
employment demand?

*Chapter 6*

1 Top rice importers, 2001–2015 .....94

*Chapter 7*

1 Profile of renter-families in the controlled and uncontrolled sector .....108  
2 Comparison of dwelling characteristics of rental units with NHA .....110  
medium-rise building units in NCR (in %)  
3 Estimated net benefit (or subsidy) by decile group .....111

*Chapter 8*

1 Wood processing enterprises in Caraga before and during EO 23 .....122

*Chapter 11*

1 HIV/AIDS knowledge score: NDHS 2008 .....169  
2 Impact of HIV/AIDS knowledge on sexual behavior of females aged 15–29 ....174

**Figure**

*Chapter 1*

1 Simplified illustration of Kahneman’s Theory of Human Decisionmaking .....15

*Chapter 2*

1 Location of economic zones .....27  
2 Regulation, mobility, welfare effects .....29  
3 Effect of the truck ban on shippers/locators .....32

*Chapter 3*

1 Annual underemployment rate, 2005–2015 .....39  
2 Labor productivity, PHP per person (at 2000 constant prices) .....39  
3 Real average daily wages from 2001 to 2015 (in PHP, 2006=100) .....40

*Chapter 4*

1 Employment by firm size .....56  
2 Number of MSMEs, 1999–2007 .....60

3	Workers in the informal sector .....	60
4	Proportion of minimum wages to average market wage per region .....	62

*Chapter 5*

1	The persistence of high poverty, unemployment, and underemployment .....76 rates, 2003–2015 (in %)
2	Percent of temps becoming regulars after a given number of quarters.....84 working as temps
3a	Probability of becoming permanent (by number of quarters: .....84 male vs. female)
3b	Probability of becoming permanent (by number of quarters .....84 and level of education)
3c	Probability of becoming permanent (by number of quarters .....84 and economic sector)
3a	Probability of becoming permanent (by number of quarters: .....84 urban vs. rural)
4	Why do some employers resort to endo practices? .....85
5	Proposed policy analysis framework for controlling endo practices.....87 and their impact on economic outcomes

*Chapter 6*

1	Exports of the top five rice-exporting countries, 2001–2014 ('000,000 tons).....93
2	Border and domestic prices, 1991–2014 (PHP/kg) .....94
3	Cost of production of paddy rice, in USD/ton .....96
4	Growth rates in domestic and border prices, annual (in %) .....99

*Chapter 7*

1	Residential types of households in Metro Manila in 2014 .....106
2	Growth of renter-families in the controlled and uncontrolled sector, .....107 selected years

*Chapter 9*

1	The basic economic theory of overfishing .....133
2	Area covered by the closed season for commercial sardine operation .....138 in the Zamboanga Peninsula

*Chapter 10*

1	Philippine poverty incidence, 2006–2015 (in %) .....	149
2	Budget of Pantawid program, 2008–2016 .....	152

*Chapter 11*

1	Age at sexual initiation by HIV/AIDS knowledge score: NDHS 2008 .....	170
2	HIV/AIDS knowledge of females aged 15–29 by district representative’s 2008 RH bill vote .....	172
3	Access to condoms of females aged 15–29 by district representative’s 2008 RH bill vote .....	173

**Box**

*Chapter 2*

1	Bangkok: Solving port congestion .....	34
---	--	----

*Chapter 8*

1	How EO 23 is damaging Caraga’s falcata industry and the social fabric .....	123
---	---	-----

**Appendix**

*Chapter 5*

1	Higher EPLs raise unemployment rate: Fixed effects model using European panel data and general least squares .....	89
---	---	----

*Chapter 7*

1	Formula for computing housing subsidy .....	114
2	Rent control laws in the Philippines, 1971–2009 .....	115

*Chapter 10*

1	Additional details on the Pantawid Pamilya program design .....	160
---	---	-----



# Foreword

Even as countries around the globe grapple with the adverse effects of the global financial crisis and the threat of rising protectionism, the Philippines has emerged as one of the fastest-growing economies in the world. Shedding its image as the “sick man of Asia”, the country has made significant strides in improving its performance in terms of output growth and employment generation. A key factor behind this remarkable performance is the Philippines’ continuing effort on policy reforms and commitment to good governance.

Notwithstanding these achievements, the Philippines continues to face major challenges. The government uses a range of tools, chiefly economic policies, to address economic challenges. Policymakers spend an enormous amount of time and talent in crafting those policy tools. The economy’s remarkable performance manifests the efficacy of those policy instruments.

Within the realm of policymaking are many well-intentioned policymakers. There is not one day that one would not hear policymakers professing love of country and concern for their constituents as the principal motivation behind the intricate art of policymaking. Noble intentions provide a good starting platform toward efficient policies, but they have to be supported by critical thinking and analysis, and an awareness of both the intended and unintended consequences of human agency.

This book challenges widely held assumptions about some socioeconomic problems and examines the policy solutions designed to address them. By exposing the unintended consequences of those policy solutions, the 10 articles in this book underscore the need for a more nuanced and evidenced-based approach to the policymaking process.

As the Philippine Institute for Development Studies enters its 40th year, it remains committed to its goal of informing policymakers and the public about evidence-based research and rigorous analyses of development issues. The Institute sincerely hopes that this book will provoke and encourage the readers to be more critical about current and proposed policy solutions to the country’s development problems.

**GILBERTO M. LLANTO**  
President



## Preface

Among the number of things that are upsetting about today's world—because definitely, there could be quite a number!—what would perhaps be the most frustrating is the quality of what passes as “critical thinking” that dominates popular discourse on public policy and programs. As researchers who try to steer public policy into constructive directions for national development, we realized that this is a big problem. It is not good for the country if the voting population and its leaders were to be swayed by arguments that solely appeal to their emotions and instinctive thoughts, unchecked by evidence-based critical analysis. Unfortunately, enabled by recent developments in information and communications technology, the country and the world at large seem to be inexorably moving toward a situation where discussion of important social issues is characterized by instantaneous and superficial analysis. Increasingly, policies are driven by instinctive thinking, factoids, and even fake news planted in cyberspace and shared by millions of Internet users as if they were facts.

The rise of what is known in social media as a postfactual world is not surprising. After all, reading a tweet or any eye-catching headline is a lot easier to digest than pages and pages of research data. But if the population subsists on a steady diet of superficiality, what would happen to this country? So the idea for the book was born: If economic researches and policy notes are too technical for most readers, why not try writing it differently? Why not try to present economic data and policy implications in an engaging format that any ordinary, reasonable person could understand and find interesting? Why not try to engage the millennials who would soon be the nation's leaders?

This book gathers various authors, current researchers, and mostly former professors to discuss some of the most hotly contested issues in recent history. The 10 case studies in this book discuss the underpinning issues behind the pervasive traffic in Metro Manila, controversial topics related to employment (e.g., minimum wage, job opportunities, contractualization), food security, rent control, deforestation and overfishing, conditional cash transfer and poverty alleviation, and sexuality education. All of these issues are written in order to reveal the folly of uncritical thinking and the consequences, albeit unintended, that follow. On this point, the findings of the 10 case studies are synthesized and presented in the first chapter. The synthesis provides a perspective on why social decisions can have those consequences and how they might be minimized.



Although the book is written in a light manner, readers are highly encouraged to read more deeply into these issues. Readers could look at the references that were used for each chapter. Beyond looking at those references, they could use the book to inspire evidence-based analytical discussions of the issues covered by the book as well as other public policy issues with colleagues, fellow students, and young leaders.

**VICENTE B. PAQUEO**

Distinguished Visiting  
Research Fellow

**ANICETO C. ORBETA JR.**

Senior Research Fellow

**GILBERTO M. LLANTO**

President

# Acknowledgment

This book took a long journey from being a simple idea to reality. To be honest, it took about two years before everything came together. This would not have been possible without a lot of help.

First and foremost, the book would not be possible without the strong support of Dr. Gilberto Llanto. As president of the Philippine Institute for Development Studies (PIDS), he gave the book the full support of the institution. Personally, he encouraged us and gave us valuable advice and ideas, including the title of the book. Further, he contributed an important chapter to the book despite his busy schedule.

We are grateful to Dr. Gerardo Sicat, founder of PIDS, for his inspiring message. We are beneficiaries of his vision of PIDS as a world-class center for sound and practical development policy research. We recognize his tremendous contributions to economic policy thinking in the Philippines; many of which we have imbibed as economic students and professional colleagues.

The Research Information Department, led by Dr. Sheila Siar with editorial and production support by Jane Alcantara, provided the much-needed administrative support to get the book from the minds of the authors to the printing press to your hands right now.

The authors would also like to acknowledge the people who helped in getting the book together. Our research assistants, Gerald Daval-Santos and Ann Jillian Adona, were invaluable in the process. The book consultants, Sophia Maria Cuevas and Maribel Daño-Luna, worked closely with the many authors who contributed to this book.

The expert reviewers who took time to vet the chapters and gave their feedback on the raw manuscript were invaluable in the process of refining the book.

Lastly, acknowledgment should also be given to those who chose to read this book. The future of the country would rely on your discernment and sober thinking. We hope you will enjoy reading the book.



# Introduction by Gerardo P. Sicat

All economic policy should help raise or sustain the national welfare, or it must be changed. An economic policy might address national issues or only a particular segment of the economy. But all good economic policies should be able to raise the welfare of the intended beneficiaries and do no harm to the overall gains in national welfare.

The essence then of sound economic policy is the promotion of the national good, where the improvements in the condition of a few do not harm or do damage to the rest of the society. Alternatively said, good economic policies promote the national good, not only the interests and desires of the few who might propose and benefit from them.

In this collection of case studies prepared by researchers in the Philippine Institute for Development Studies (PIDS), we encounter different examples where the “good intents” of economic policies had also led to “bad outcomes”. Bad outcomes are almost always unintended, given that economic policies are put in place to improve on preexisting conditions. By definition, any reform of economic policy needs to correct what is bad or deficiently lacking as to require change.

A close reading of why some policies resulted in bad, unintended outcomes reveals a defect in design. A design defect could arise from the selfish myopia of reform proponents who focus mainly on seeing their own gains, neglecting or just assuming that no further effects are likely to happen. Or it may be due to a firm belief about the justness of their cause.

Yet, sometimes, bad policies are the result of poor judgments. The great John Maynard Keynes had once famously commented concerning “practical men who believe themselves to be quite exempt from any intellectual influence [who] are usually the slaves of some defunct economist.” Or it could be simply that political compromise brings in amendments to an otherwise well-intended law that spoils the outcome.

The cases span over many areas of national life. Among the topics touched on are employment and unemployment issues, direct income assistance, the growing of food, minimum wage, contractualization of labor, investment incentives, and various sector and industrial policies.

Each case contributes to the understanding of why poverty and disparity in income opportunities are persistent problems in the nation.

I take this opportunity to congratulate PIDS for its work as a major think tank for economic and social policies in the nation. When I proposed its creation in 1977, my humble hope then was that it would grow into an institution that would help the nation's institutions in providing analysis and sound policy advice. It has done so remarkably well.

According to the *2015 Global Think Tank Report* prepared by the University of Pennsylvania, PIDS is the top social policy think tank in Southeast Asia and ranked 37th among the top 100 in the world. More than 6,600 think tanks located in 198 countries were assessed in that report.

## List of Acronyms

4Ps	- <i>Pantawid Pamilyang Pilipino</i> Program
AFMA	- Agriculture and Fisheries Modernization Act
AIDS	- acquired immunodeficiency syndrome
APIS	- Annual Poverty Indicators Survey
ARMM	- Autonomous Region in Muslim Mindanao
ASEAN	- Association of Southeast Asian Nations
BFAR	- Bureau of Fisheries and Aquatic Resources
BOI	- Board of Investments
BP	- <i>Batas Pambansa</i>
CALABARZON	- Cavite, Laguna, Batangas, Rizal, and Quezon
CAR	- Cordillera Administrative Region
CCT	- conditional cash transfer
CNFIDP	- Comprehensive National Fisheries Industry Development Plan
CPI	- consumer price index
DENR	- Department of Environment and Natural Resources
DOLE	- Department of Labor and Employment
DTI	- Department of Trade and Industry
EO	- Executive Order
EPL	- employment protection law
EPZ	- export processing zone
FIES	- Family Income and Expenditure Survey
FSSP	- Food Staples Sufficiency Program
GDP	- gross domestic product
HDMF	- Home Development Mutual Fund
HIV	- human immunodeficiency virus
HUDCC	- Housing and Urban Development Coordinating Council
IFMA	- Industrial Forest Management Agreement
ITQ	- individually transferable quota
JAO	- Joint Administrative Order
JICA	- Japan International Cooperation Agency
kg	- kilogram
LCP	- Labor Code of the Philippines
LFS	- Labor Force Survey
LGU	- local government unit
LME	- labor market efficiency

LMW	- legal minimum wage
LTFRB	- Land Transportation and Franchising Regulatory Board
MEY	- maximum economic yield
MMDA	- Metro Manila Development Authority
MRB	- medium-rise building
MSY	- maximum sustainable yield
MSME	- micro, small, and medium enterprise
NCR	- National Capital Region
NDHS	- National Demographic and Health Survey
NFA	- National Food Authority
NFARMC	- National Fisheries Aquatic Resources Management Council
NFRDI	- National Fisheries Research and Development Institute
NHA	- National Housing Authority
NHTS-PR	- National Household Targeting System for Poverty Reduction
OECD	- Organisation for Economic Co-operation and Development
PDP	- Philippine Development Plan
PD	- Presidential Decree
PIDS	- Philippine Institute for Development Studies
PSA	- Philippine Statistics Authority
RA	- Republic Act
RH	- Reproductive Health
RTWPB	- Regional Tripartite Wages and Productivity Board
SMF	- Self-Monitoring Form
SME	- small and medium enterprise
SONA	- State of the Nation Address
SOPHIL	- Southern Philippines Deep Sea Fishing Association, Inc.
sqm	- square meter
SSS	- Social Security System
SUDECOR	- Surigao Development Corporation
SWS	- Social Weather Stations
TEC	- temporary employment contract
TEU	- twenty-foot equivalent unit
US	- United States
WPE	- wood processing enterprise
WPP	- wood processing plant
WTO	- World Trade Organization
WYSIATI	- what you see is all there is

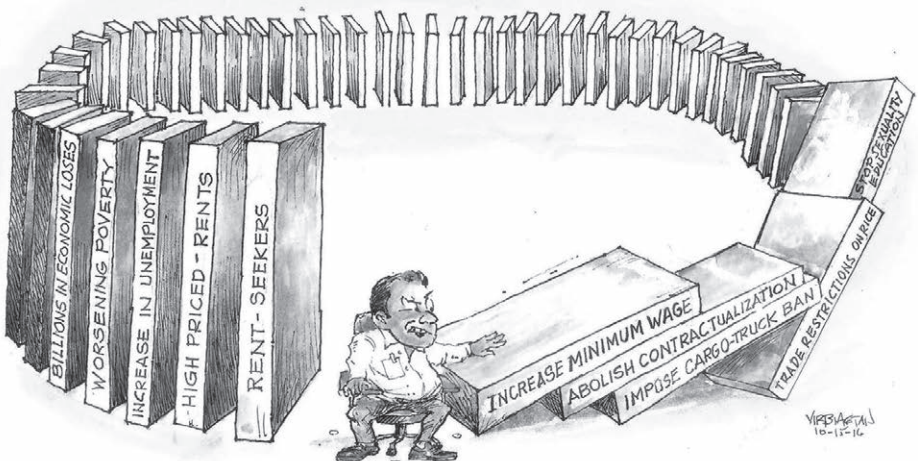
## Chapter 1

# Synthesis of Selected Case Studies of Philippine Policies and Programs

Vicente B. Paqueo, Aniceto C. Orbeta Jr.,  
Gilberto M. Llanto, and Maribel A. Daño-Luna

***“A little learning is a dangerous thing;  
Drink deep, or taste not the Pierian spring:  
There shallow draughts intoxicate the brain,  
And drinking largely sobers us again.”***

- Alexander Pope, An Essay on Criticism (1711)





### Introduction

Philippine history is littered with popular policies and programs that not only fail to achieve their objectives but, worse, often have unintended adverse consequences for the very people they are supposed to help. In contrast, unpopular policies that turn out to have positive impact are still heavily criticized. This book presents 10 case studies illustrating such predicament.

Do the unintended consequences of public decisions matter? Why do they occur? And what can be done about them? These are the questions that animate the succeeding 10 chapters of this book. With them, we hope to engage the readers to think more deeply and broadly about the impact of government interventions on their lives and the public good.

The topics of the 10 chapters are some of the most pervasive, controversial, and pressing socioeconomic issues of our time. From daily concerns like food, salary, rent, small-scale enterprises and environmental concerns like overfishing and logging, the book also tackles controversial topics like sex education, minimum wage, conditional cash transfer, and temporary employment.

This chapter lays out key findings of the 10 case studies on the above questions and reflects on the lessons learned from those studies and some of the possible reasons why those unintended consequences happen. In conclusion, we discuss a few general ideas on how unintended adverse effects can be dealt with. For detailed ideas, the reader should look at the individual chapters. In some chapters, you may find that the authors lay out concrete alternatives, while others propose framework of analysis. In further reviewing the topics in this book, the readers are encouraged to have an open critical mind—to connect the dots and come up with your own insights on other possible more optimal alternatives.

### Key findings and lessons learned

Philippine economic policies were mainly liberal as inherited from colonial legacy. World War II, other crises, and the 1935 Constitution<sup>1</sup> brought restrictions in economic policies such as trade protectionism and discriminatory policies, which led to negative effects on labor, capital, and land.

Restriction is not always the better option for the society; some restrictions have varying degrees of unintended consequences. Economic policies were again

---

<sup>1</sup> This section draws from Sicat (1986, 2002).

liberalized in the 1970s as a response to the problems with restrictions. And up to this day, economic liberalization continues. But not without consequences as there were missed opportunities: post-World War II, the Philippines has been following an inward-looking (import substitution) strategy for too long and was late in switching to export-oriented strategy compared to successful Asian countries like Taiwan and South Korea. For every flawed social, economic, political decisions made in our history, the poor and marginalized group take the most beating due to negative unintended consequences. It is important to note that no matter what the political situation is, correct policy paves the way for beneficial economic reforms.

Clearly, the unintended consequences of the policies and programs being examined in the subsequent chapters do matter. Their adverse impact on the welfare of the poor and vulnerable people calls for careful and immediate attention. Policymakers must ensure greater awareness of those unintentional detrimental effects, especially on the vulnerable, and should think of ways to reduce them, including compensatory measures. At the end of this section, we present some of the key findings and lessons learned (Table 1) from each of the 10 case studies.

### **Employment, income, and poverty**

Chapters 3 and 4 report that increases in legal minimum wages (LMWs) tend to have negative effects on employment, income, and poverty incidence. Contrary to the claim of advocates for higher LMWs, rapid rises in LMWs in the Philippines (unlike in the United States or US and other developed economies) do hurt the incomes of average households. The poor are particularly adversely affected, as evidenced by increased poverty incidence rate in regions with more rapid rises in LMWs. One explanation is that while some workers (e.g., members of organized labor), who are lucky to remain employed after LMW increases, do benefit from higher wages, fewer of the vulnerable members of poor households remain employed because of higher LMWs. Moreover, they are likely to work fewer hours.

The discriminatory nature of high LMWs is documented in the mentioned chapters. They noted that increases in LMWs reduce the comparative chances of employment for female, less educated, young, and inexperienced workers (those with low human capital). Higher LMWs also appear to have unfavorable effects on small and medium enterprises (SMEs). While large companies can afford to sustain employing more workers as LMWs rise, SMEs tend to reduce their workforce. This means that higher LMWs put SMEs at a disadvantage over large firms.

In Chapter 5, the potential impact of the “anticontractualization” proposals shows that the curtailment, if not the prohibition, of all temporary employment contracts

(TECs) could lead to slower growth of employment and gross domestic product. Although demonized by anticontractualization advocates, TECs have important roles to play that make labor markets more efficient and inclusive. TECs are needed to deal efficiently with seasonal, fixed-term, project-based demands as well as unexpected business fluctuations and economic shocks. Prohibiting TECs would mean less flexibility in the deployment of labor when and where they are needed and are most valued. It would also mean Philippine enterprises would be less competitive relative to other countries.

Equally important, such policy would reduce the ability of workers with poor credentials to get regular jobs in the formal employment sector. As curtailment of TECs would drive labor cost higher, workers would have fewer opportunities of moving from informal to formal jobs. Creating more opportunities for the informal sector and landless agricultural workers should arguably be the central task of Philippine development. On this score, data indicate that these workers are so much worse off than “endo”<sup>2</sup> workers. The latter may not have all the entitlements of regular workers such as security of tenure, but available data indicate endo workers are satisfied with their jobs, which come with social security coverage, at least minimum wages, and other benefits that informal and landless agricultural workers can only dream of.

If the hefty increases in LMW currently being demanded by labor unions and the pending bills in Congress to abolish all forms of TECs were approved, their effects would make labor inputs even more expensive. It is more concerning if those effects were added on top of the impact of the many employment protection regulations already in place. It should be noted that currently, we rank low in labor market efficiency and rate high in labor cost relative productivity compared to our international competitors (Chapter 5).

Many of the present policymakers are aware of the relatively high cost of hiring (and firing) workers. Past national administrations have, therefore, sought to attenuate the impact of those regulations on employment by establishing fiscal incentives to reduce business expense and accordingly motivate expansion of industry output and employment.

On that point, Chapter 4 analyzes the Board of Investment’s fiscal incentives and their effects on employment and output. As expected, output increased. But this was due to greater use of capital inputs rather than increased use of labor. Therefore, contrary to its main objective of promoting employment, those fiscal incentives did not significantly increase employment. This finding highlights the importance of

---

<sup>2</sup> Endo refers to “end of contract”.

incentive design. In this case, the fiscal incentive design made the use of equipment and other capital inputs cheaper in the context of a situation where employment protection legislation continues to keep the cost of employment elevated. The reason for this behavior is that employers are likely to use less labor per unit of output, as the government tends to make capital inputs cheaper than employment of labor.

### **Social and self-sufficiency programs and human development**

Chapters 6, 10, and 11 examine, respectively, the impact of the rice import restriction policy, the *Pantawid Pamilyang Pilipino* Program (4Ps), and the Reproductive Health (RH) Law's sex education mandate on the next generation's human capital.

On this, Chapter 6 reveals that single-minded pursuit of rice self-sufficiency program has led to the unintended consequences of increasing food prices which contributed to the malnutrition and stunting of children less than five years old. This highly important finding indicates that children below five years old become chronically malnourished and, therefore, their growth and long-term human capital could be compromised.

Further on the issue of human development, Chapter 10 finds, based on a series of evaluation studies, that defunding 4Ps would have hurt human capital formation among the children of the poor. On the whole, 4Ps has been shown by these studies to significantly improve children's school enrollment, health services utilization, and household spending on education and health. There are many other positive effects like significant reduction in self-rated poverty and greater optimism about the beneficiaries' future. The chapter also provides rigorous evidence belying claims used by critics to argue for the scaling down or abolition of 4Ps (Table 1). Contrary to the opinion of critics, the program does not encourage laziness, mendicancy, dependency, or spending on gambling, alcohol, entertainment, and other vices.

More on human development, Chapter 11 presents solid evidence that failure to implement comprehensive sex education in school would lead to earlier sexual initiation and higher rate of sexual activity among less-informed young adults. This finding contradicts the claim of critics opposing comprehensive sex education in school. The evidence indicates that those consequences will subsequently lead to reduced human capital, as manifested by lower level of educational attainment.

### **Sustainable management of natural resources**

Sustainable natural resource management is a critical issue for the Philippines. Decades ago, the country was mostly covered with lush natural forests. But years of rapid and indiscriminate logging of Philippine forests coupled with little reforestation and

massive regulatory failures have led to massive deforestation. Similarly, the country has been blessed with rich marine fishing grounds that have been valuable sources of food and livelihood. Unfortunately, they have become increasingly less productive and many are in danger of depletion.

At the heart of the natural resources sustainability problem has been the generally open access nature of Philippine forests and fishing grounds, which has led to the unintended consequence of overfishing and rapid deforestation. How to protect these natural resources from illegal logging and depletion, effectively and efficiently, has been quite challenging. Chapters 8 and 9 discuss two examples (Caraga and Zamboanga case studies, respectively) of how government has dealt with the challenge. These studies illustrate contrasting approaches and consequences.

In the Caraga wood industry study, we find that the ban against cutting logs in the remaining natural forests failed to achieve its avowed conservation objective. Instead, the implementation of Executive Order (EO) No. 23 (2011) intensified corruption, drastically reduced the number of wood processing plants (WPPs) from 119 to 27, and raised the cost of legitimate tree farming. In Caraga, over 95 percent of timber sold to the WPPs come from tree plantations and farms.

The reason for the observed outcomes is that the policymakers and implementers of EO 23 underestimated the power of rent-seeking opportunities they have unleashed and the attractiveness of the incentives for corruption they have created. The incentives for rent-seeking are so powerful that corruption ends up defeating the avowed objective of EO 23. One of the reasons why EO 23 and its implementation strategy is not working is the lack and unwillingness of the national government to widely consult with and encourage participation of the wood industry stakeholders in the design and implementation of the policy. From tree farmers and civil society organizations to investors and managers of WPPs, this lack of consultation is a common complaint.

But another factor that caused the drastic reduction of WPPs is the Department of Environment and Natural Resources' (DENR) outdated regulatory design that strongly links the number of WPPs strictly to the available supply of local timbers. Instead of liberalizing the importation of timbers from other countries in the medium run and facilitating expansion of tree farming in the long run, the government is doubling down on strictly applying an outdated system of limiting WPPs to DENR's estimates of locally available logs.

The Caraga study also shows that the total log ban (Chapter 8) ironically resulted in some well-protected natural forests (under the Industrial Forest Management Agreement or IFMA) reverting effectively to open access status and quickly becoming

havens for illegal loggers, *kaingin* farmers, and informal settlers. The closure of the Surigao Development Corporation (SUDECOR), a well-known recipient of international awards for sustainable forest management, is a case in point of how government's lack of respect for acquired property rights leads to social problems due to open access.<sup>3</sup>

Zamboanga's response to overfishing of its sardines is different. Due to high demand for sardines by its sardine industry, Zamboanga faced an impending depletion of its fishing grounds. The industry became unsustainable. Closures or underutilization of its sardine factories became imminent.

The underlying problem of fishing in open access waters is that fishermen seek to maximize their profit in the short run regardless of its impact on the reproductive capacity of the seas. Without effective mechanisms to control their practices, competition among fishermen was on the way to driving down the fish population to a level where their ability to spawn and grow their young to reproductive age would be compromised. So, what did Zamboanga do?

Chapter 9 presents a case study of how stakeholders of Zamboanga's sardine industry addressed the issue. In summary, they have chosen to act collectively in ways that keep the industry profitable and sustainable for its participants over the long haul by prohibiting fishing during certain months of the year. The closed season would allow the fishes to spawn and grow to reproductive age.

This case study highlights the power of harnessing the stakeholders' self-interest through information, consultation, and government facilitation to drive sustained collective action that would prevent fish depletion—a diametrically opposed strategy to the one adopted by the DENR in Caraga with regard to the conservation of natural forests. While not perfect, the results of the Zamboanga strategy have been highly encouraging. The abundance of sardines has increased and the closing of fishing grounds during certain months of the year has been institutionalized with strong support from the stakeholders.

### **Infrastructure and housing**

Traffic congestion in Manila is a perennial problem that is becoming increasingly worse and costlier over time. To relieve the congestion problem, the city government imposed a truck ban. Chapter 2 finds that the social cost of the remedy is huge and outweighs its benefit when its unintended adverse consequences are taken into account. This study

---

<sup>3</sup> SUDECOR was given the responsibility, under an IFMA signed by DENR, to manage the conservation of hectares of natural forest in exchange for the exclusive right to cut some trees in their assigned areas to defray the cost of maintaining and protecting the forests. These became effectively open access areas again with the closure of SUDECOR and the lack of government monitoring and enforcement capacity.

illustrates how an intervention can be worse than the disease it was supposed to cure. The case study also points to the huge social cost of failure to do a proper cost-benefit analysis prior to the approval of the ban.

Initially, the truck ban provided immediate relief to harried commuters and nontruck drivers; reduced gas emissions were also a definite benefit. There were private gains from the truck ban, but there were also huge losses to society due to longer delays in transporting production inputs and outputs. So the relief did not last and the truck ban was lifted after a few months.

If only the local government, in coordination with the national government, invested more in the proper cost-benefit evaluation of the truck ban policy prior to its implementation, billions of pesos in economic losses could have been saved. A careful study might not have been deemed necessary. Many people felt that traffic congestion would undoubtedly be eased by banning the behemoth cargo trucks plying the roads everyday and inconveniencing thousands of commuters and car drivers by taking up too much space. This failure to do due diligence is not uncommon in situations where the expected benefits seemed obvious but the unintended consequences seemed not, at least at the time when the policy issue was framed.

Rent control (Chapter 7) of housing for low-income families in Metro Manila led to ill-maintained houses that lack essential facilities like toilets, bathrooms, and water supply. This is a noteworthy unintended consequence of low-cost housing rent control policy. This policy has generated negative spillover effects that raise public health, safety, and environmental issues. A rigorous evaluation is necessary to compose an effective strategy on housing.

**Table 1. Unintended consequences of policies and programs:  
Lessons from the case studies**

Chapter Number and Title	Lessons
2. Cargo Truck Ban: Bad Timing, Faulty Analysis, Policy Failure	Traffic congestion in Manila is a perennial problem that has become increasingly worse and costly over time. Hence, people across the metropolis rejoiced when the City of Manila declared a truck ban, effectively preventing cargo trucks from crowding the roads. Commuters and passengers collectively felt relieved to have saved a few minutes in their daily journey from home to work. Subsequently, however, the truck ban had to be set aside as the price of those precious minutes saved has unintentionally added up to major economic losses reaching billions of pesos.

Table 1 (continued)

Chapter Number and Title	Lessons
<p>3. The Impact of Legal Minimum Wages on Employment, Income, and Poverty Incidence in the Philippines</p>	<p>Contrary to common belief, mandating rapid rises in legal minimum wages (LMWs): (i) is likely to reduce work hours of average workers; (ii) can be disadvantageous to the very groups that LMWs are intended to protect (the young, inexperienced, less-educated, and women laborers); and (iii) tends to ironically reduce average household income and raise poverty rate. These results provide a cautionary tale against annual proposals for large increases in LMWs to promote inclusive growth.</p>
<p>4. Trading Off Worker Flexibility for Job Security: Missed Opportunities for More and Better Jobs</p>	<p>Empirical estimates show that financial incentives provided by government have raised output. This increase is due to greater use of capital inputs rather than increased use of labor. Contrary to its main objective of promoting employment, these fiscal incentives did not significantly increase employment. The reason for this result is that the incentives design made the use of equipment and other capital inputs cheaper, while employment protection legislation continues to keep the cost of employment elevated. A lesson here is that employers are likely to use less labor per unit of output when use of capital is cheaper than employment of labor.</p>
<p>5. Beware of the “End Contractualization” Battle Cry</p>	<p>Further curtailment, if not abolition, of temporary employment contracts would likely: (i) reduce gainful employment opportunities in the formal sector, (ii) impede the movement of workers from informal to formal employment, and (iii) reduce the chances of workers with poor credentials to become regular workers. In short, the proposed policies of the anticontractualization advocates are exclusionary rather than inclusive.</p>
<p>6. Food (In)security and the Price of Rice Self-Sufficiency</p>	<p>Contrary to the noble objective of protecting families, particularly vulnerable people, against rice shortages, the government’s rice self-sufficiency policy has in fact been harmful to consumers. This policy has led to higher consumer prices and, consequently, to greater malnutrition, particularly children stunting.</p>
<p>7. Beyond the Rent: Studying the Unintended Consequences of Housing Rent Control Law in Metro Manila</p>	<p>Housing rent control was introduced to protect tenants against high prices and allow them to save money. International literature reports that rent control programs caused deterioration in rental housing stock and reduction in supply of affordable rental housing. In Metro Manila, rent control of housing for low-income families appears to have led to ill-maintained houses that lack essential facilities like toilets, bathrooms, and water supply. The above findings point to the need to collect data to rigorously evaluate the unintended effects of low-cost housing rent control, given the importance of their implication for health, safety, and environmental issues.</p>



Table 1 (continued)

Chapter Number and Title	Lessons
8. Planting Seeds of Self-Defeat: Effects of Unrealistic Regulations on the Caraga Wood Industry and Forest Conservation	Executive Order (EO) No. 23 was issued to stop any logging of trees in the country's remaining natural forests. This study finds that EO 23 (i) has failed to achieve much of its avowed objectives and (ii) has damaged wood industry development. The reason for these outcomes is that policymakers underestimated the power of the opportunities for rent-seeking they unleashed and the attractiveness of the incentives for corruption they created. The incentives for rent-seeking are so powerful they end up defeating the avowed objective of EO 23, while in the process undermining good governance, raising the cost of tree farming, and reducing the number of wood processing plants. As a result of EO 23, some remaining natural forests have reverted to open access areas, becoming havens for illegal loggers, kaingin farmers, and informal settlers.
9. Reducing the Unintended Consequences of Open Access Fishing: Lesson from the Zamboanga Experience	The Philippines is rich with marine fishing grounds. Sadly, many of them have become increasingly less productive and are in danger of depletion. At the heart of the problem is the generally open access nature of the country's fishing grounds. Coupled with lack of effective mechanisms to control it, open access has led to the unintended consequence of overfishing. This case study highlights the power of harnessing stakeholders' self-interest and government resources to drive sustained collective action to prevent fish depletion.
10. Pantawid Pamilyang Pilipino Program: Boon or Bane?	The Pantawid Pamilyang Pilipino Program has been much maligned and dismissed as a "dole out" that would encourage laziness and welfare dependence. Critics also accused parents of spending their cash assistance on gambling, entertainment, alcohol, and other unnecessary expenditures instead of using the assistance for children's health and educational needs. Rigorous impact evaluation of the program belies the critics' concerns. The evaluation also shows that the program has had a significant impact on various education, health, and other welfare-related indicators. This case study provides many lessons learned. A key lesson is the power of credible evidence to sustain an effective propoor program and defend it against uncorroborated criticisms and attacks based on unfounded beliefs and ideology.

Table 1 (continued)

Chapter Number and Title	Lessons
11. The Irony of RH Law Critics' Opposition to Comprehensive Sex Education	Critics raised an objection to a provision of the Reproductive Health (RH) Law mandating comprehensive sexuality education in schools. They claim that it would lead to earlier sexual initiation and higher rates of sexual activity among them. Analysis of sexual behavior by young adult females discussed in this chapter does not corroborate that claim. On the contrary, less-informed women tend to have earlier sexual initiation and higher rate of sexual activity among young adults. The evidence further indicates that those consequences will likely lead, subsequently, to reduced human capital, as manifested by lower level of educational attainment. If RH Law's critics had their way, the long-term welfare of many young adults would have ironically suffered from well-meaning opposition to mandated comprehensive sex education.

Source: Authors' compilation from the case studies

## Critical thoughts on uncritical thinking

If public policies are envisioned to improve problematic situations, then why do they sometimes, despite best intentions, worsen present conditions? While for policies that seem to work, why do critics incessantly call for its abolition? This paradox is captured and illustrated in more details in the succeeding 10 chapters of this book.

Problematic policies, as summarized in the previous section, are something we are all, unfortunately, familiar with. We are exposed everyday to a barrage of such issues shown in the television, or discussed in the radio, or more ubiquitously posted on social media. In reality, most of us start our day with worries of paying our rent, finding a job, or paying for our food. We can relate to all these issues and more, because even after 17 government administrations since we gained independence, long-standing socioeconomic problems still persist up to this day. What is more concerning is that some current policy proposals, supposed to offer better solutions, continue to follow this formula for fixes that fail.

This is the folly of uncritical thinking.

And it leads to damaging, although, unintended consequences.

Masked in noble intentions, these conventional, sometimes reactive and at worse flawed, policies and programs are traps into which we often fall. Second thought must be given to such policies and programs.

### **Hypotheses regarding sources of unintended consequences**

Earlier, we asked, “Do the unintended consequences of public decisions matter? Why do they occur?” This section is intended to interpret and analytically organize some of the findings and observations of the 10 case studies with regard to the question of what brings about unintended consequences. The objective in this section is not to formulate definitive conclusions. Rather, it is to help the readers organize their thoughts about unintended consequences and their implications in reading the case studies.

Everyday, we make decisions with varying levels of importance, urgency, or intensity. Difficult decisions require careful thought for they can have long-term effects that can be intended or unintended. When a person decides, usually the intended effect is desirable, while most of the time the unintended effect is negative. “Ignorance”, “error”, “imperious immediacy of interest”, “basic values”, and “self-defeating predictions” are sources<sup>4</sup> of unintended consequences further illustrated in the next section. In reading the ensuing case studies in this book, it is useful to recognize these factors at the onset. Identification of the sources of unintended consequences is an important skill in order to be more careful about passing judgement and therefore in proposing actions.

Ignorance is an obvious source. The chapters on “Pantawid Pamilyang Pilipino Program: Boon or Bane?” and “The Irony of RH Law Critics’ Opposition to Comprehensive Sex Education” narrate such case of ignorance. Ignorance does not necessarily mean not having information on hand but rather not utilizing information that could have been easily obtained prior to making the decision. Viewing government intervention as a cost to be minimized, some critics call for abolition of such programs instead of seeing it as an investment in human capital where eventual returns can be maximized. While ignorance is an important source of unintended consequences, the role of ideology and values are also critical forces that must be recognized to fully understand these cases. On this point, it is arguable based on evidence from the case study of 4Ps that if critics who vigorously opposed the program had their way, they would have destroyed the country’s most effective and well-designed social assistance program. Poor families, especially in far-flung areas, would have lost a chance to produce the next generation of educated family members and with them rise from poverty.

---

<sup>4</sup> The first and most complete analysis of the concept of unintended consequences was done in 1936 by the American sociologist Robert K. Merton. In an influential article titled, “The unanticipated consequences of purposive social action”, Merton identified five sources of unanticipated consequences. These sources are also elaborated by Rob Norton in his 2008 article on “Unintended consequences”.

Another source of unintended consequences is *error* usually brought about by habitual action that often led to success. A particular chapter illustrating error, one of the pervasive sources of unintended consequences, is the “Trading Off Worker Flexibility for Job Security: Missed Opportunities for More and Better Jobs”. In granting fiscal incentives to small and medium enterprises, the hope of increasing employment did not happen as expected as firms utilized more capital and less labor through a process known in economics as “substitution or price effect”. This jobless expansion of output is due to incentive design issues. That is, the government provided inappropriate incentives that encourage the use of more equipment and other capital inputs relative to employment of labor.

This case illustrates why we need to carefully look at the incentives underlying a program and to understand how people react to these incentives. The idea is to ensure that there is incentive compatibility between desired objectives and the instruments chosen to attain them. Public policies that are not grounded on this principle are unlikely to achieve their objectives. In fact, they could lead to outcomes that are the opposite of expectations. Examples of these policies are the one-size-fits-all six-month regularization law and the proposed bills in Congress abolishing all forms of temporary employment contracts insofar as the government objective of inclusive growth is concerned (see Chapter 5, “Beware of the ‘End Contractualization’ Battle Cry”). High minimum wage policies can also be viewed similarly (Chapter 3).

Just because a particular policy or program design worked before or perhaps in other countries does not mean it will work again in the local setting. The chapter on the impact of minimum wages illustrates the risk of justifying higher minimum wages based on the US research results where applicability in the Philippines has not been validated. Careful scanning of prevailing policy environment and related incentive design—expensive Philippine labor due to high legal minimum wage and required regularization of contract workers—is crucial.

Yet another source of unintended consequences is *imperious immediacy of interest*, which refers to instances in which the intended consequence of an action is wanted so much that unintended effects are purposefully ignored. The chapter on “Food (In)security and the Price of Rice Self-Sufficiency” is an example of this. For many decades now, the aspiration has been to produce our own rice. With the parallel aim of protecting local rice farmers, rice import was banned. This led to unintended consequences of high price in rice.

Another example is the chapter on “The Impact of Legal Minimum Wages on Employment, Income, and Poverty Incidence in the Philippines” where intense

interest by the workers to raise the legal minimum wage actually resulted to unintended consequences of lower employment and job loss for the vulnerable and the disadvantaged workers: the women, the young, the inexperienced, the less educated, and the poor.

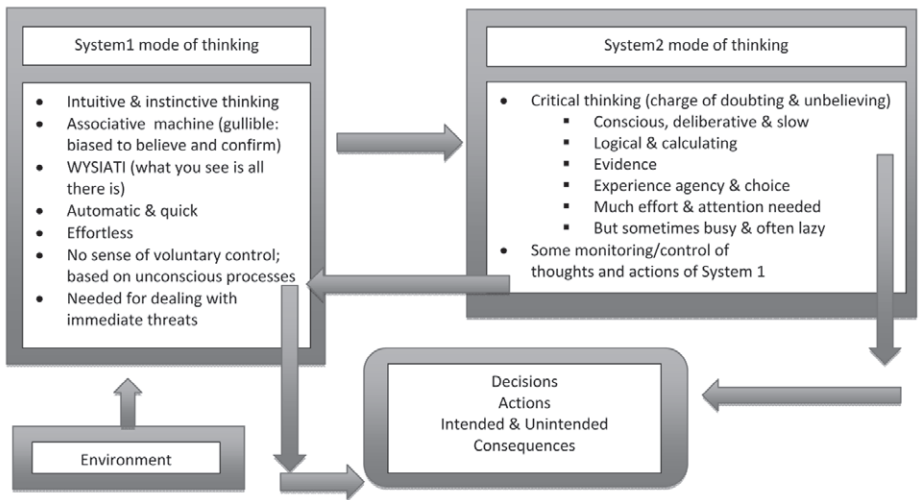
The two chapters on “Planting Seeds of Self-Defeat: Effects of Unrealistic Regulations on the Caraga Wood Industry and Forest Conservation” and “Reducing the Unintended Consequences of Open Access Fishing: Lessons from the Zamboanga Experience” are examples of policies with *basic values* as source of unintended consequences. The paradox is that the “realization” of values may lead to their renunciation. EO 23 imposed total log ban with the aim of reducing, if not totally eliminating, illegal logging. Field investigations for the Caraga wood industry study reveal that illegal logging increased after the EO with prevalence of rent-seeking and corruption. In contrast, the Zamboanga case of sardines overfishing, which led to closures and underutilization of sardine factories, has avoided fish depletion due to the development of stakeholders’ consciousness, aligning self-interested (profit) with communitarian values (collective action).

There are instances when the sources of the unintended consequences are *self-defeating predictions*. In the chapter, “Beyond the Rent: Studying the Unintended Consequences of Housing Rent Control Law in Metro Manila”, there is an unfounded fear that lifting rent control will lead to increase in rental prices. But the unintended consequence of the rent control is that owners do not spend much for repair of their rental spaces while tenants are burdened with the costs of repair. In the chapter, “Cargo Truck Ban: Bad Timing, Faulty Analysis, Policy Failure”, the reactive stance in declaring cargo truck ban in Manila resulted in a negative unintended consequence to interregional trade. Subscribing to common sense, removing the cargo trucks led to port congestion paralyzing the delivery of goods, some perishable, thereby effectively increasing price of affected products.

Political economy plays a vital role in understanding the occurrence and persistence of policies that are unintentionally unfavorable to the public good and to the interest of the poor and the vulnerable. In this regard, it is also important to consider that the poor and informal workers are diffused and that it is costly for them to organize collective activities. Therefore, they are less able to push their interest effectively compared to the intense and vociferous organized labor.

But even when we use the political economy lens to make cold calculations of the gains and losses of different population groups, there would remain limits to our capacity to understand individual and public decisions. According to “theory of bounded rationality” of Simon (1957, p. 198; 1972, p. 163), a person is bounded by

Figure 1. Simplified illustration of Kahneman’s Theory of Human Decisionmaking



Source: Authors’ simplified illustration of Kahneman’s theory

“cognitive limits” since they cannot process all the information needed. As a result, decisions can naturally lead to errors of judgment and unintended consequences.

Looking at unintended consequences from the perspective of bounded rationality and related ideas widens and deepens our ability to recognize fundamental mental processes that can significantly account for those consequences. This recognition can point us to useful ways of limiting the adverse effects of flawed decisionmaking processes. On this, we find the theory of Kahneman (2011) particularly helpful. Daniel Kahneman, a Nobel Laureate behavioral psychologist and economist, provides a model in which human decisions are seen as products of two modes of thinking, labeled as System 1 and System 2 (Figure 1). System 1 is the instinctive-intuitive mode of thinking. It operates automatically and quickly, with little or no effort; and it has no sense of voluntary control. This mode of thinking (part of the survival kit of humans forged through evolution) equips them with a tool to effectively and quickly deal with immediate threats.

The instinctive-intuitive system is a machine that associates ideas currently activated or retrieved from memory (consciously or unconsciously). The machine tends to settle on a coherent pattern of activation and suppresses doubt and ambiguity (Kahneman 2011, p. 88). For Kahneman, the success of the instinctive-

intuitive mode of thinking depends on the coherence of the story it is able to put together from its activated ideas. For this reason, this mode of thinking is biased “to believe” conclusions that are consistent with a person’s deeply ingrained world view (or narrative) through which he intuitively and instinctively interprets reality.

Kahneman, therefore, argues that since coherence with the individual’s deep-seated world view is enough to make a particular argument compelling, quality and quantity of evidence largely do not matter. So does completeness of the argument. This feature follows from a fundamental rule governing System 1 operations, which states that “what you see is all there is” (WYSIATI).

There are several implications to this line of thought. By his reckoning, the instinctive-intuitive mode can weave the best possible story from currently activated ideas, but it cannot allow for information it does not have. Remember the above WYSIATI rule. So, when we lack information, our instinctive-intuitive mental processes act as a machine for jumping to conclusions. In this regard, Kahneman (2011) stresses that the instinctive-intuitive mode of thinking does “not allow for the possibility that the evidence that should be critical to our judgment is missing” (Kahneman 2011, p. 88).

To summarize the fundamental role of the WYSIATI rule in System 1 operations, Kahneman says:

“WYSIATI facilitates the achievement of coherence and of the cognitive ease that causes us to accept a statement as true. It explains why we can think fast and how we are able to make sense of partial information in a complex world. Much of the time, the coherent story we put together is close enough to reality to support reasonable action” (Kahneman 2011, p. 88).

But against these advantages, Kahneman provides a list of risks and disadvantages, some of which are discussed below after briefly describing System 2, the critical thinking mode.

In contrast, the operations of System 2, which relate to critical thinking, are deliberative, logical, and calculating in contrast to the instinctive-intuitive mode of thinking. Again for convenience, we sometimes refer to System 2 simply as “critical thinking”. On this point, one of the fundamental functions of critical thinking is to check and control the biases of the instinctive and intuitive mode, which is constantly making “suggestions” to System 2. Consistent with the mentioned function, its inclination is “to doubt and unbelieve”. But critical thinking is slow and requires focused attention and a lot of effort. Consequently, critical thinking is selective in its control of our instincts and intuitions. On this point, the following insight from

Kahneman (2011) is important for understanding how the human mind works, particularly with regard to the interaction between the two systems. To wit:

“... Jumping to conclusions is efficient if the conclusions are likely to be correct and the costs of an occasional mistake is acceptable, and if the jump saves much time and effort. Jumping to conclusions is risky when the situation is unfamiliar, the stakes are high, and there is no time to collect more information. These are the circumstances in which intuitive errors are probable, which may be prevented by a deliberate intervention by System 2” (Kahneman 2011, p. 79).

But even under those circumstances when critical thinking would have been worthwhile, humans nevertheless often jump to conclusions for which they could suffer huge unexpected losses. One explanation for this observation is that our critical thinking ability is subject to certain vulnerabilities like distractions and mental depletion (fatigue). Those vulnerabilities make our critical thinking faculty “lazy”, distracted, and less reliable. Kahneman (2011) points out in this regard that “the combination of a coherence-seeking System 1 with a lazy System 2 implies that System 2 will endorse many intuitive beliefs, which closely reflect the impressions generated by System 1” (Kahneman 2011, p. 86).

There are several examples of jumping to conclusions from the 10 case studies in this book. An example is the decision to adopt regulations that would drastically reduce the number of wood processing plants in Caraga to conserve the remaining natural forests, even though 95 percent of the log inputs used by the plants already come from commercial tree farms (Chapter 8). Another example is the argument that since the poor need more money to meet decent living standards, employers should, therefore, be compelled to pay higher minimum wages to reduce poverty rate (Chapter 3). Yet another example is the claim that, since regular employees enjoy better wages and benefits than workers on temporary employment contracts, compelling enterprises to give all temporary workers regular job status will promote inclusive growth (Chapter 5).

Kahneman’s analysis points to possible practical actions that could reduce our tendency to jump to conclusions. It would be worthwhile for our young readers and future leaders to think about them. First, when we are dealing with unfamiliar issues and the stakes are high, we should seek more information and listen to the views of others, assuming those issues do not have to be resolved immediately. Second, listening to independent-minded individuals with diverse backgrounds will reduce confirmation bias and the chances of encountering missing evidences that are critical



to make a correct decision. Confirmation bias is the tendency of the instinctive-intuitive mode of thinking to seek data that would confirm rather than refute one's current beliefs. Exposure and open-mindedness to independent views from diverse sources are valuable practices for getting fresh ideas and for countering the danger of "group think" and overconfidence. A relevant observation by Kahneman (2011) on this point and the WYSIATI rule is instructive. He says:

“... neither the quantity nor the quality of the evidence counts for much in subjective confidence. The confidence that individuals have in their beliefs depends mostly on the quality of the story they can tell about what they see, even if they see little” (Kahneman 2011, p. 88).

## Conclusions, reflections, and recommendations

It is clear from the case studies that the unintended consequences of public policy and program decisions do matter. They hurt people, especially vulnerable citizens, and waste valuable scarce resources on well-intentioned activities that do not achieve avowed objectives.

There are various explanations why those unintended consequences occur. They include, among others, ignorance, poor habits of the mind, political exigencies, belief systems, problem complexity, and failure to think critically. In the Philippines, we find that lack of evidence-based critical thinking contributes significantly to the adoption or advocacy of policies and programs that have or would have led to unintended adverse consequences.

The above conclusions imply the need to ensure that policymakers and the public weigh more deeply and broadly the consequences of actual and proposed policies and programs. On this score, we recommend more investment in data collection and analysis, including strengthening the capacity of research institutions to undertake credible impact evaluation of policies and programs. This investment would enable political leaders, voters, and experts to make well-grounded and more transparent social decisions.

It is often the case that government interventions are largely driven by populist pressures, half-baked ideas, and narrow private-vested interests, as should be expected in a democracy. What is concerning is the lack of transparency of current social decisions and their consequences. Relatedly, it is also concerning that public discussions of policy issues are not well-informed by good analysis and evidence.

Typically, proposed interventions are clothed with noble objectives. They then masquerade as commonsense solutions to social problems with little supporting evidence and rigorous analysis. Unknown to voters, some of those proposed interventions tend, in fact, to create unintended adverse consequences that lower the well-being of people, especially the vulnerable groups. The case studies in this book present this view in detail.

This is not to undermine the scope and depth of how far we have come as a nation. In fact, in many chapters in this book, the remarkable rise of the Philippines as one of the fastest growing economies in the world is lauded. The discussion in each of the chapters is food for the thoughts with recommended alternatives. It does not pretend to offer the panacea to the plethora of issues in our country. Rather, this book is a humble admission and brave recognition of what confronts our society today—the need for deeper thinking and veering away from damaging policy decisions or policy oppositions based on uninformed opinions and blind submission to popular and traditional systems of ideas and ideals.

*So indeed little knowledge is a dangerous thing. So drink deeply and be sober.*

That is the main message of this book. So, while there is no argument on the need to base public decisions on solid analysis and good evidence, good information and evidence are lacking for properly crafting and vetting proposed interventions. This problem is exacerbated by government failure to systematically conduct impact evaluation to measure the ex-post effects on outcomes of approved interventions.

But even when relevant information is available, policymakers often are blinded by factors such as biases due to ingrained values and beliefs, lack of critical thinking and open-mindedness, and failure to think independently. Moreover, they often are impeded by political pressures arising from pursuit of narrow self-interests that are inconsistent with the public good.

Still, greater transparency regarding the impact of major policies and programs through more evidence-based evaluations of their impact would go a long way to avoid harmful unintended consequences of policies and programs. The political leadership, both young (students) and old, must insist that proposals for legislative action and issuances of executive orders and regulations must be underpinned by a clear and sound theory of change and credible empirical evidence to back them up. The objective here is to establish strong institutions for impact evaluation and the development of capable young, independent-minded Filipinos who are passionate about public policy proposals and discussions that are evidence based and analytically sound.

Finally, as a parting recommendation to our young readers, it is crucial in reading the book to scrutinize not just the nobility of policy objectives but also how the choice

of instruments can lead (or not lead) to the achievement of the desired outcomes or result in harmful unintended consequences. Remember that depending on your assumptions about the causal mechanisms that underlie your theory of change, choosing different alternatives for solving a social problem may or may not result in different outcomes (intended or unintended). As you develop in your mind your own world view and theory of change, be aware of confirmation bias, our tendency to jump to conclusions, the value of listening to diverse and independent views, and the virtue of open-mindedness and critical thinking. On this score, it is generally a good practice to seek out ideas on alternative ways of reaching a desired objective and compare them with the proposals on the table, while paying attention to the gravity and cost of their unintended consequences.

To conclude, as public policy's aim is to maximize benefits to all members of the society, it poses a challenge for us to deepen the policy conversations especially with our access to obtainable evidences. After all, change is also up to us. We have the power to tell our policymakers the choices we want them to make.

## References

- Kahneman, D. 2011. *Thinking, fast and slow*. New York, NY: Farrar, Straus and Giroux
- Merton, K. 1936. The unanticipated consequences of purposive social action. *American Sociological Review* 1(6):894–904.
- Norton, R. 2008. *Unintended consequences*. Library of Economics and Liberty. <http://www.econlib.org/library/Enc/UnintendedConsequences.html> (accessed in September 2016).
- Pope, A. 1711. *An essay on criticism*. 1st ed. London, England: W. Lewis.
- Sicat, G. 1986. A historical and current perspective of Philippine economic problems. PIDS Monograph Series No. 11. Makati City, Philippines: Philippine Institute for Development Studies.
- . 2002. Political economy of Philippine economic reforms. UPSE Discussion Paper No. 2002-07. Quezon City, Philippines: University of the Philippines School of Economics.
- Simon, H. 1957. *Models of man: Social and rational*. New York, NY: John Wiley & Sons, Inc. [https://www.researchgate.net/publication/226706264\\_Herbert\\_A\\_Simon](https://www.researchgate.net/publication/226706264_Herbert_A_Simon) (accessed in September 2016).
- . 1972. Chapter 8: Theories of bounded rationality. In *Decision and organization*, edited by C.B. McGuire and R. Radner. New York, NY: North-Holland Publishing Company. [http://innovbfa.viabloga.com/files/Herbert\\_Simon\\_\\_\\_theories\\_of\\_bounded\\_rationality\\_\\_\\_1972.pdf](http://innovbfa.viabloga.com/files/Herbert_Simon___theories_of_bounded_rationality___1972.pdf) (accessed in September 2016).

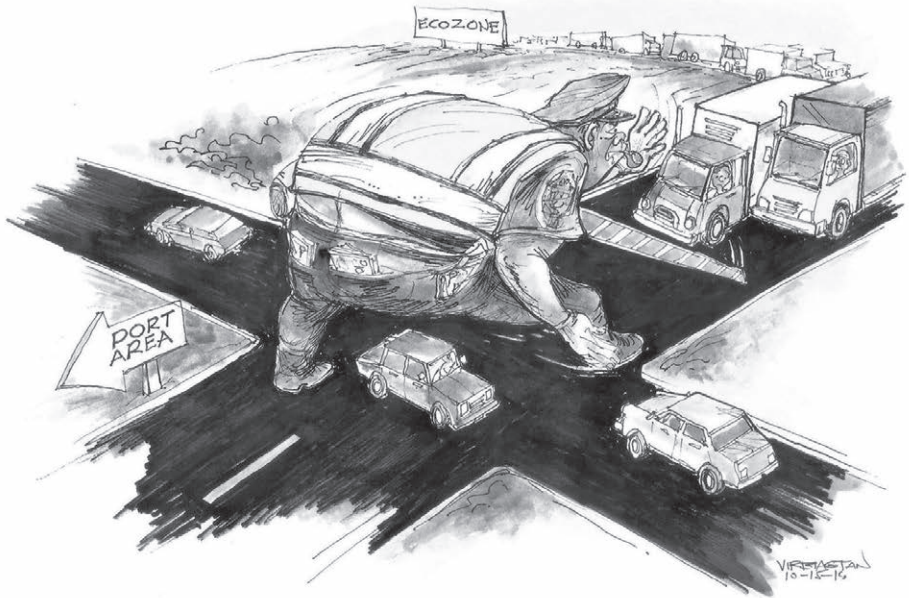
## Chapter 2

# Cargo Truck Ban: Bad Timing, Faulty Analysis, Policy Failure<sup>1</sup>

Gilberto M. Llanto

### Abstract

Everyone has an opinion on how to solve the terrible traffic plaguing Manila every hour of every day. Many people blamed the behemoth cargo trucks plying the roads daily, inconveniencing thousands of commuters and car drivers by taking up too much space. People across the metropolis rejoiced



“ECONOMIC LOSS WORTH PhP44B”

<sup>1</sup> This chapter draws data and information on the truck ban from Patalinghug et al. (2016).

when the City of Manila declared a truck ban, effectively preventing cargo trucks from crowding the roads. Commuters and passengers collectively felt relieved to have saved a few minutes in their daily journey from home to work. Ultimately, the price of those precious minutes added up to major economic losses reaching billions of pesos. Who would have imagined that things could go wrong?

## “Gates of hell?”

It is a sweltering Friday afternoon. Stressed and stewing in her car, an office worker-mom waits for the traffic to clear up in the main street of the City of Manila, the country’s capital city. Meanwhile, in the schoolgrounds, her daughter is inconsolable and crying her heart out as she waits for her mom. Staring at the long line of jeepneys, cars, passenger taxis, buses, cargo trucks, lorries—an assortment of vehicles of various sizes, model, and weight ahead of him, a salesman is all but ready to strike a Faustian bargain with anyone who can unlock the monstrous traffic jam. He is dying to close a sale! Perhaps, that traffic aide, a pirouetting dervish in the middle of the intersection, desperately trying to put some order in the streets, can help?

Alas, traffic would not flow smoothly through the narrow streets designed for what was once a middling-sized city but is now a huge urban center. The city streets are clogged, constricted arteries for traffic that has rapidly grown as the city developed. The elevated rail transit, expected to relieve street-level traffic, is a decrepit lumbering transport, often prone to mechanical failure because of bad maintenance. Those who cannot and will not use the rail transit take the transport available in the streets.

At the street level, an endless flow of mammoth cargo trucks and container vans; thousands of undisciplined jeepneys—relics of a bygone war; a cacophony of motorcycles and cars; and hordes of employees, workers, students, and businessmen move in and out of the city. With a sudden heavy downpour or a minor traffic accident, bedlam ensues, and everything could be at a standstill. It is as if the hapless commuter is staring at the “gates of hell”, a churlish depiction of the city given by a forgettable pop writer. The mom will be late in picking up a traumatized daughter; the salesman will go home dejected after losing both his sale and job. Bosses will glare at workers who try to leave early to beat the traffic. Tempers will flare. Road rage could ignite anytime. This is every commuter’s daily inferno. This is a vehicle driver’s daily descent to chaos. Everyday, without letup, the city is dubiously described as the “gates of hell”.

## Doing the math

If you, dear reader, were a city dad, what would you do? Logic dictates finding a quick, doable solution to this daily nightmare, is it not? Then, why not a cargo truck ban? Thousands of these humungous kings of the road ply the city streets, denying commuters precious road space. Each day as many as 24,903 trucks are estimated to enter Metro Manila, and as many as 31,183 leave Metro Manila, according to a 2010 study by the Japan International Cooperation Agency (JICA) and Department of Public Works and Highways.

Taking those huge trucks off the streets at particular hours of the day will provide greater mobility to thousands of commuters—students, employees, professionals, workers, wives, husbands, salesmen, and the like. With traffic flowing smoothly, frazzled nerves and elevated blood pressures of harassed commuters will be calmed down, and the city will run more smoothly. There will be more time for studying, rest and recreation, and quality time with loved ones. With better mobility in the city, daily business transactions in the private sector and the government will be done more quickly.

Thus, the city council passed City of Manila Ordinance No. 8336, which prohibited trucks with gross weight of 4.5 tons and above from plying the city streets from 5:00 a.m. to 9:00 p.m., from Monday to Saturday.<sup>1</sup> However, the ordinance underwent several modifications soon after. As discussed below, the ordinance disrupted the business operations of the transport, logistics, and manufacturing industry, including those of the Bureau of Customs. The government responded to numerous complaints by modifying the original ordinance (Table 1). This chapter tells the story and the lessons of this costly exercise.

## The predicate

The City of Manila, like the proverbial phoenix, literally rose from the ashes of destruction in an unforgiving Second World War. With grit and resolve, the city has since then become a major metropolis. It is a large city. The postwar population was

---

<sup>1</sup> The truck ban as a measure to relieve road congestion is nothing new to Metro Manila. In 1978, Ordinance No. 78-04 by the Metro Manila Development Authority prohibited cargo trucks with gross vehicle weight of more than 4 tons from using the major thoroughfares within the metropolis during the peak travel hours from 6:00 a.m. to 9:00 a.m. and 4:00 p.m. to 9:00 p.m., with exception on weekends and holidays. A series of modifications of the ordinance has occurred over the years.

Table 1. Chronology of the Manila truck ban

Date	Event
February 4, 2014	City of Manila Ordinance No. 8336 prohibits trucks with gross weight of 4.5 tons and above from plying city streets from 5:00 a.m. to 9:00 p.m.
February 24, 2014	The truck ban was modified to provide a five-hour window (10:00 a.m. to 3:00 p.m.) for loaded trucks for six months; trucks with empty containers were not covered.
May 12, 2014	The truck ban was again modified to provide a seven-hour window (10:00 a.m. to 5:00 p.m.) for loaded trucks.
June 9, 2014	The Metro Manila Council issued a resolution allowing cargo trucks from Manila ports to use an express lane on Roxas Boulevard for 24 hours a day, Mondays to Sundays, except Fridays, from June 10 to December 10, 2014.
August 18, 2014	The City of Manila opened a second 24-hours-a-day express lane on the stretch of Quirino Avenue and Osmeña Highway.
September 1, 2014	The Metro Manila Development Authority (MMDA) restricted cargo trucks to only a single lane on C5 road to help ease traffic flow.
September 8, 2014	MMDA implemented the “last mile” project that allowed 3,000 trucks to move the cargoes that had long piled up at the ports and bring them to their warehouses up to September 22, 2014. The trucks with “Lastmayl” stickers were allowed to complete their journey during the hours covered by the truck ban in Manila and other cities.
September 13, 2014	Manila Mayor Joseph Estrada issued Executive Order (EO) 67 which lifted the truck ban indefinitely.
September 16, 2014	President Benigno S. Aquino III issued EO 172 which declared the Ports of Batangas and Subic as extensions of Manila ports during times when there is port congestion and other emergency cases to be determined by the Philippine Ports Authority.

Source: Patalinghug et al. (2016)

swelled by a rising tide of migrants from the provinces who came over the years, clutching in their hearts hopes of finding jobs and a better life in the metropolis. The City of Manila, one of the largest component cities of the National Capital Region (NCR),<sup>2</sup> has a population density of more than 41,000 people per square kilometer. Its daytime population swells to a much larger number because of the number of daily commuters who work, study, and do business in Manila but retire elsewhere in the suburbs as evening comes.

<sup>2</sup> The NCR, some still call it Metro Manila, is the most populous region in the country with roughly 12.6 million population and the 16th most populous metropolis in the world.

The city is host to a large number of business establishments, hospitals, public markets, commercial centers, and institutions of higher learning. The most important government agencies are in the City of Manila. It hosts the official residence of the president of the Philippines (the Malacanang Palace), major government agencies (the Departments of Budget and Management, Finance, Justice, Public Works and Highways), and other institutions (Philippine General Hospital, Supreme Court, Court of Tax Appeals, University of the Philippines, Professional Regulatory Commission, Bangko Sentral ng Pilipinas, Land Bank of the Philippines, Immigration Commission, and Bureau of Customs).

A complex transport and logistics network sustains the economy of the City of Manila, and more importantly, the entire Philippine economy. The Port of Manila is the mecca of almost all importation and exportation activities in the country. It is composed of the North and South Harbors and the Manila International Container Terminal. Huge trucks and container vans ferry cargoes to the Port of Manila for transshipment to domestic and foreign markets.

JICA reports that the Port of Manila accounts for approximately 2.7 million twenty-foot equivalent units (TEU)<sup>3</sup> of international cargo traffic per year. In 2013, the *Journal of Commerce* described the Port of Manila as the 38th busiest port in the world. Every week, shipping lines make an average 20–30 ship calls in the Port of Manila. Huge cargo trucks move as much as 26 percent or 50 metric tons of the country's total cargo throughput in 2012. No wonder the city streets become almost unnavigable when behemoth cargo trucks and container vans bound for the port lumber through the narrow city streets!

An important fact that the reader should bear in mind is that the Philippine economy now is not the same economy we were looking at 10 years ago. It is no longer the “sick man of Asia” as its many detractors would call it. The economy is robust and gross domestic product (GDP), a common measure of performance, has grown at a fast and steady clip in the past decade. GDP growth rate averaged at close to 6 percent during the period 2010–2015.

This is a far better performance compared to the record of the other Association of Southeast Asian Nations (ASEAN) countries in the same period. In the first quarter of 2016, GDP grew at 6.9 percent, the highest growth rate in East Asia, and it is better than those of China and the other ASEAN countries.

---

<sup>3</sup> Standard unit for describing a ship's cargo carrying capacity or shipping terminal's cargo handling capacity. A standard forty-foot (40x8x8 feet) container equals two TEUs (each 20x8x8 feet). Source: <http://www.businessdictionary.com/definition>



A substantial share of GDP (53.5%) is generated in the NCR and CALABARZON (Cavite, Laguna, Batangas, Rizal, and Quezon) area, south of Manila, where many of the economic zones are located (Figure 1). High GDP growth implies an increase in container traffic and more cargo throughput in the Port of Manila, and necessarily more cargo trucks in the streets and inside the port. Domestic and foreign firms, especially those located in the economic zones, now import larger volumes of critical raw materials and intermediate inputs and ship out more manufactured products assembled and processed in those economic zones.

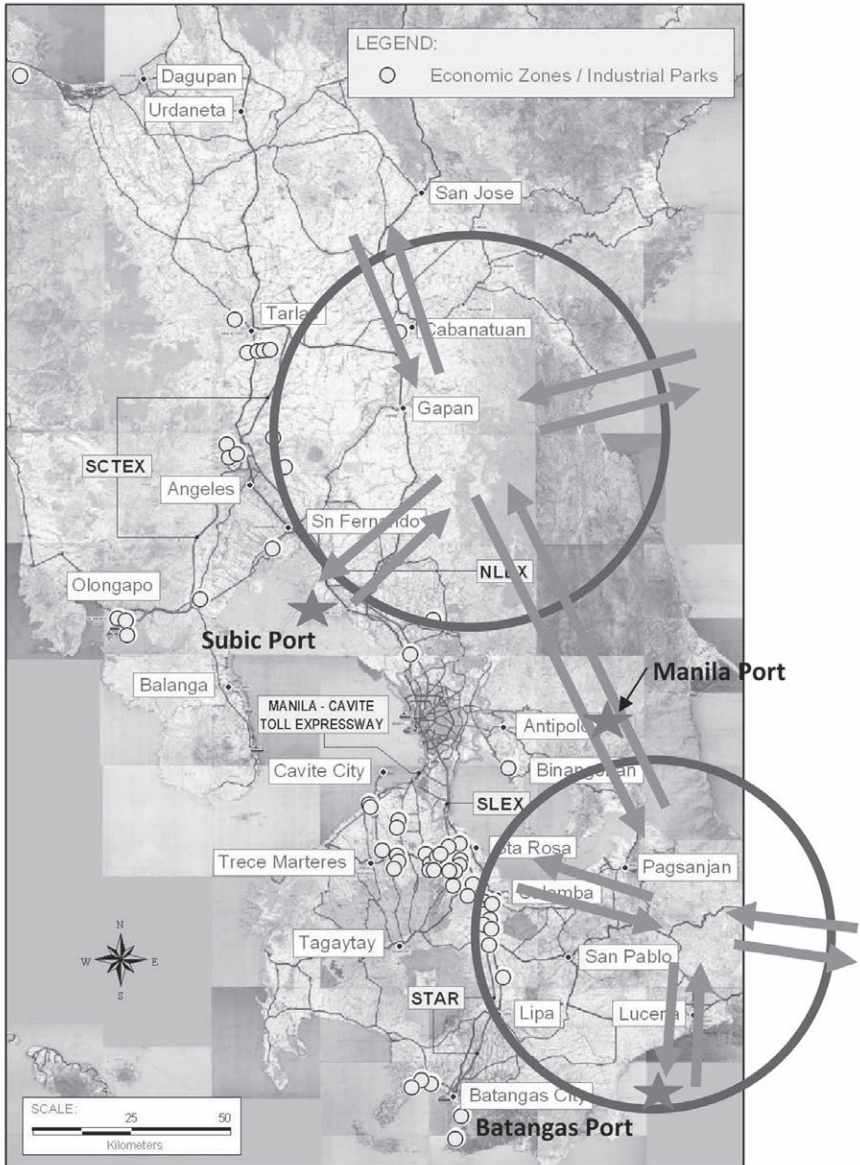
The Port of Manila links the country to the East Asian and global production chains. Today's phenomenon is the global product, for example, a computer, which is put together as a final product in a particular ASEAN country with parts coming from different parts of East Asia and the world. The Philippines has a vital role in those production chains. This means that everyday, there is two-way transport of intermediate and final goods between the economic zones and the Port of Manila. Cargo trucks exiting from the economic zones take the South Luzon Expressway onward through the streets of the City of Manila and finally to the Port of Manila. The cargoes coming from the economic zones are loaded to waiting shipping vessels that transport them to different countries participating in the production chain. Likewise, intermediate and final goods coming from other countries find their way to the Port of Manila for transport to the economic zones. There is no alternative route. Thus, an inevitable road congestion arises whenever those cargo trucks pass through the city streets on their way to the Port of Manila.

The City of Manila, then, is not only the country's political capital but also practically the economic capital of the country. Trade and commerce, the lifeblood of the economy, flow through the arterial streets of Manila to and from its ports. But those road arteries are clogged, and this is largely attributed to the daily procession of huge cargo trucks. Thus, it seems just common sense to ban cargo trucks during certain hours of the day, a practical solution offered by practical denizens of city hall. Did it work?

## **Benefit and unintended cost**

The truck ban provided immediate relief to harried commuters and nontruck drivers. A reason for rejoicing was the greater mobility as traffic flowed faster in the city streets during the operating hours of the truck ban. Reduced gas emissions were definitely a benefit. However, it turned out that the common sense solution is simple

Figure 1. Location of economic zones



Source: Base map of economic zones and industrial parks (JICA and DPWH 2010)

to implement, but it is also simplistic. True, there were private gains, but there were also huge losses to society. The expected benefits seemed obvious, but the unintended consequences seemed not, at least at the time when the ordinance was framed.

Let us use Figure 2 to explain the unintended consequence of the truck ban on consumers and producers. The cargo trucks formed long queues as they waited to get in and out of the Port of Manila. Meanwhile, during the period when the truck ban was in effect, it was reported that it took quite some time to get the Land Transportation and Franchising Regulatory Board (LTFRB) approval of the applications of for-hire (cargo) trucks for yellow license plates.<sup>4</sup> In plain language, the bureaucrats sat on those applications. This could potentially worsen the artificial shortage of trucks. To alleviate a touchy situation, the LTFRB issued Resolution 05, series of 2014, which is a “no-apprehension policy” of for-hire trucks using green plates.<sup>5</sup> The government’s good intentions were waylaid by some rent-seeking [euphemism for extortionist] traffic enforcers. Despite the “no-apprehension policy”, those traffic enforcers continued to apprehend cargo trucks that used green license plates. All these created an artificial shortage of trucks, which then led to the higher cost of trucking services during this period and higher trucking fees.

Cargo movement was constrained. Truckers reported cases of delay in the delivery of goods to clients. Businesses incurred production losses and interruptions that caused a temporary shortage of goods in the market. As a consequence, consumers in Metro Manila suffered from increase in commodity prices during the latter part of the third quarter of 2014.

During the seven-month period of the truck ban, commuters were relieved of traffic jams, but ironically as consumers, they faced higher-priced goods due to delayed delivery and spoilage of goods compounded by the higher cost of trucking services.

What about the producers? The truck ban, together with the assignment of particular routes inside the city for trucks to traverse, constrained the movement of cargo to and from the Port of Manila. The irony was that road congestion was relieved, but nobody seemed to have anticipated a negative spillover effect: **port congestion**.

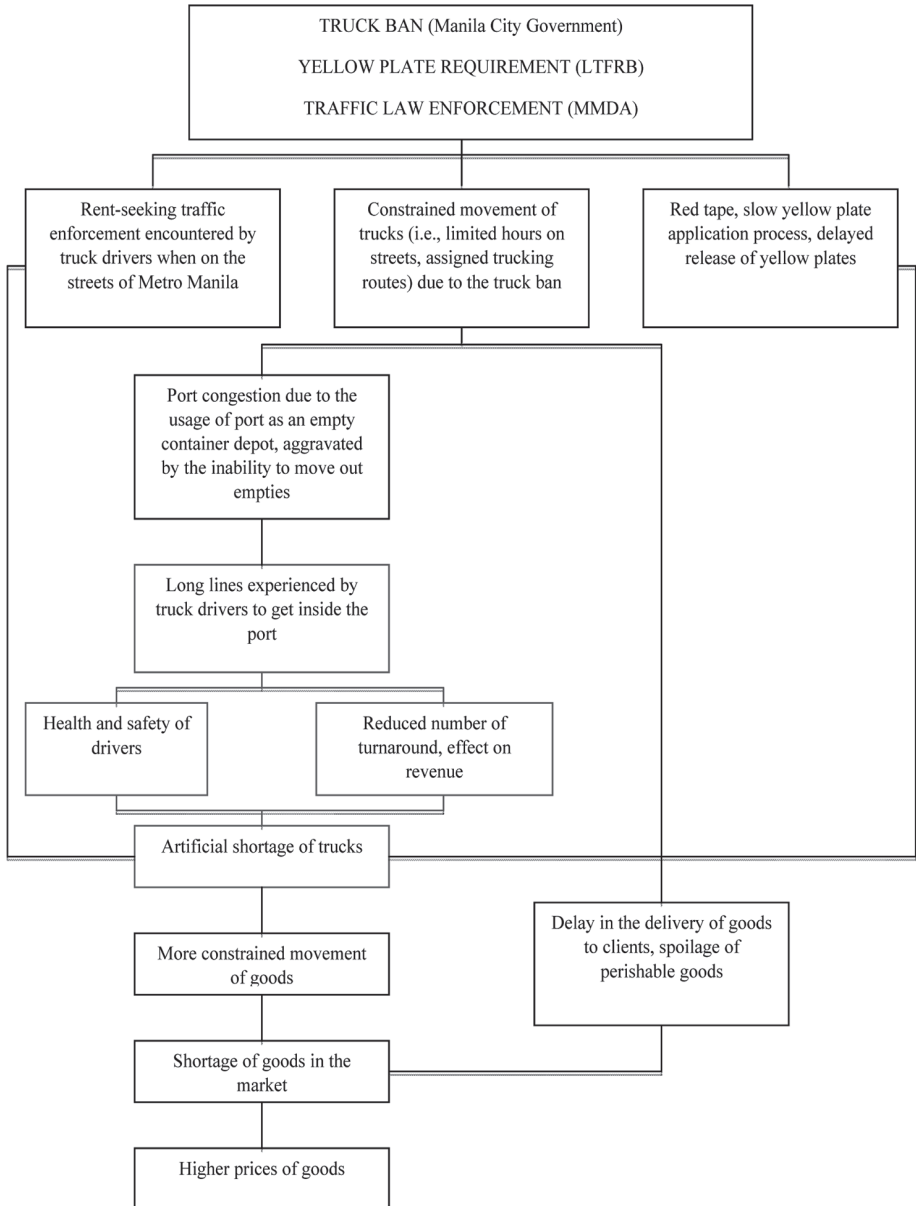
Before we proceed, a word about congestion in the Port of Manila is in order. Congestion in the Port of Manila is common especially in the months of July up to December when importation activities are at its peak. This is due to high consumer

---

<sup>4</sup> Vehicles used in business are given “yellow” license plates. Vehicles for private use are given “green” license plates.

<sup>5</sup> The resolution provides for a one-month suspension (June 28–July 28, 2014) of Joint Administrative Order 2014-01, which imposes higher penalties and stiffer sanctions on traffic violations including colorum operations.

Figure 2. Regulation, mobility, welfare effects



Source: Patalinghug et al. (2016)

demand during the Christmas season. However, the port authorities have always managed to ensure that cargoes move in and out of the port despite the congestion. There was congestion both in the roads and in the Port of Manila, but generally the situation, although inefficient, was tolerable. This was the situation before the economy picked up and started to register high growth.

Note that the truck ban was operative during the months of July, August, and September 2014 when importation to stock up for the Christmas season was peaking. Cargo trucks caught inside the ports during the operative hours of the truck ban could not move out with their cargoes. They had to wait inside the port area until they were free to move. The result? The daytime truck ban (see Table 1) drastically constrained cargo throughput and the transport of empty containers out of the port area. The trucks laden with off-loaded cargoes competed with trucks carrying empty containers for space within the ports. Meanwhile, in practice, not all empty containers are moved out of the port area. Shipping lines had the (bad) habit of leaving empty containers in the port area. Port congestion was being blamed on the truck ban, but it was also partly due to the practice of shipping lines of using the port as a container yard for empty containers!

Now a chain of events exacerbated an already worsening situation. The congestion inside the port affected the off-loading of cargoes because the container yard was operating beyond its rated capacity. The container yard could only contain a fixed volume of off-loaded containers, but the available space was also accumulating empty containers. The difficulty of off-loading cargoes prompted the shipping lines traditionally calling at the Port of Manila to turn down bookings by local importers, exporters, and freight forwarders. Those shipping lines knew that they would face problems of loading and off-loading cargoes at the Port of Manila, and sadly, they also knew that cargoes and containers bound for the Port of Manila were temporarily on hold in Hong Kong, Singapore, and Kaohsiung until the infamous congestion at the Port of Manila had cleared up.

Meanwhile, trucks were forming long queues at the vicinity of the City of Manila waiting for the allowable time to enter the city and move to the port. But once inside the port, they could be caught inside by the truck ban because of the slowdown in port activities brought about by the congestion. This meant fewer turnaround trips resulting in an artificial shortage of trucks and delayed delivery of imports and exports.

Port congestion as a result of the truck ban led to time delay in cargo releasing. It is normal for some shipments to face delays in the release of cargo of one day to a month. This happens sometimes because of documentation problems. This was before the truck ban. After the ban, delays took much longer, anywhere from a week to three

months (Table 2). Such costly delays affected the smooth operation of the logistics chain, and ultimately, the firms in the economic zones. Survey data indicated that the cost of shipping a 20-ft or a 40-ft container by truck doubled from PHP 18,000 before the truck ban to PHP 36,000 after the truck ban.

In the end, the port congestion adversely affected the country's main supply chain (Figure 3). Remember that the lion's share of GDP is produced in the NCR and CALABARZON, and that the Port of Manila is the country's vital link to regional and global production chains.

Table 2. Quantifying the time delay of cargo releasing due to the truck ban

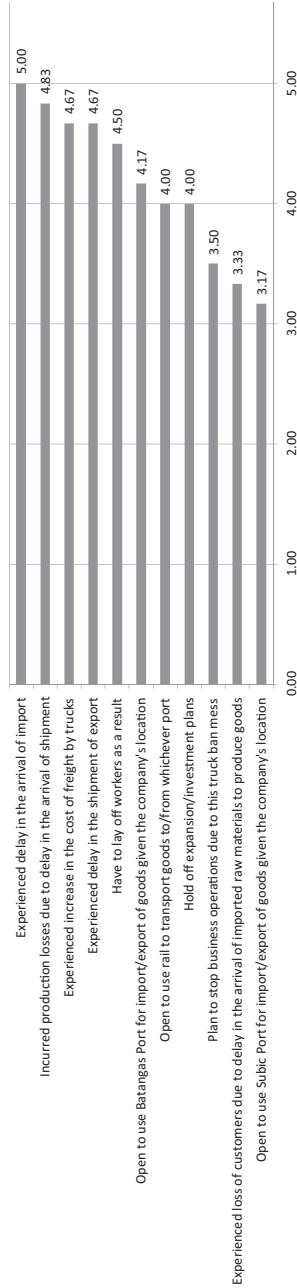
Before the Truck Ban	After the Truck Ban
1 month	2-3 months
1 day	more than a week
3-4 days	7-10 days
1 week	2-3 weeks
3 days	1 week
	1 month delay

Source: Patalinghug et al. (2016)

Final and intermediate goods failed to reach their intended recipients in time, and transport costs increased due to an artificial shortage of trucks as truck drivers made fewer and fewer trips. At stake were the shipping of manufactured products from the economic zones, such as electronic products, high-voltage cables, industrial tape, automobile parts and components, mineral fuels, lubricants, organic and inorganic chemicals, food, cereals, plastics, furnitures, industrial machinery and equipment, aerospace and motorcycle parts, air compressors, and many others.

Soon, exporters, importers, freight forwarders, logistics service providers, truckers, shipping lines, port terminal operators, and manufacturers were all raising a howl. The newspapers bannered problems of disrupted operations, production delays, shutdown due to nonarrival of imported materials, cancellation of orders, diversion of goods destined to Manila to other ports elsewhere, increase in rental of forklifts, overtime cost and warehousing fees, and finally job losses due to output losses. The Bureau of Customs joined the chorus of complainants. It experienced a huge slowdown in customs collections, and the revenue losses were not trivial.

Figure 3. Effect of the truck ban on shippers/locators



Note: 5-point scale: 5 - strongly agree; 4 - agree; 3 - neutral; 2 - disagree; 1 - strongly disagree  
 Source: Patalingug et al. (2016)

Table 3. Economic cost of the seven-month cargo truck ban

Bureau of Customs revenue losses.....	PHP 25.55 billion
Output losses.....	PHP 18.20 billion
Vehicle operating cost.....	PHP 0.099 billion
<b>Total .....</b>	<b>PHP 43.85 billion</b>

Source: Patalinghug et al. (2016)

Nobody ever imagined that a simple solution will create a serious disruption of the very lifeblood of a growing economy! On September 13, 2014, the City of Manila lifted the truck ban indefinitely. How much were the economic losses due to the seven-month cargo truck ban? A study team of the Philippine Institute for Development Studies (PIDS) estimated total losses of PHP 43.85 billion (Table 3).

The estimated economic cost includes employment and output losses of manufacturing firms in economic zones **net** of the benefits of the truck ban benefits (reduced emissions and reduced traffic congestion in the restricted areas).<sup>6</sup> To provide a scale for what the truck ban cost the economy, in 2014, the Department of Social Welfare and Development conditional cash transfer budget was around PHP 62.61 billion to benefit more than 4 million poor households. The economic cost of the truck ban could have covered up to 70 percent of the budget for conditional cash transfers to poor households!

## Postmortem

There is no doubt that huge cargo trucks moving to and out of the City of Manila contribute to road congestion. Imposing a cargo truck ban will provide relief to commuters and nontruck drivers, but it will never solve the road congestion problem. Road congestion is not rooted at the volume of cargo truck movement during the productive daytime hours. The problem lies with the fact that those trucks are compelled to use the city streets to get to the Port of Manila, the country's major seaport. The Port of Manila is the country's most important shipping gateway for both domestic and international trade and is a vital link to regional and global production

<sup>6</sup> One crude estimate put the cost of the truck ban at PHP 61.2 billion up to PHP 320 billion, with benefits from the reduced emissions and traffic congestion at PHP 30 billion.



### Box 1. Bangkok: Solving port congestion

Since 1947, the Bangkok port of Klongtoey had been the main commercial port of Thailand, but it had problems accommodating large ships of more than 12,000 DWT, length greater than 172 meters and draught of more than 8 meters in relation to mean sea level. As the economy and international trade grew, it began to experience port congestion. The Thai government decided to have a deep-sea port and concluded that the best location to build a new port was LaemChabang, 130 kilometers from Bangkok.

In 1973, the government started expropriation of land; a stone-laying ceremony for the construction of the new port was done on November 15, 1987, and finally, LaemChabang Port offered commercial port services in 1991. LaemChabang Port was developed in several stages to accommodate the growing demand for port services. The period of construction for the third phase is from 2011 to 2020 with a specific goal in mind: the Port Authority of Thailand wants to rank itself among the world's top 10 countries with the highest port traffic.

Bangkok experienced port congestion and it did not trifle with middling solutions. It made the decision to build a new port outside the city. It built a new port and solved the problem.

*Such foresight, such decisiveness!*

Source: [http://www.laemchabangportphases.com/port\\_01\\_en.htm](http://www.laemchabangportphases.com/port_01_en.htm)

chains. It is an essential part of the economy's transport and logistics network that services the needs of consumers and producers alike, especially manufacturing firms at the economic zones south of Manila. By necessity, cargo trucks have to be in the streets of Manila regardless of the road congestion they create. As policymakers think about the benefit arising from a truck ban, they should also be aware of the economic costs, especially the unintended consequences of their policy decision. In the particular case of the truck ban, this chapter showed how costly the truck ban was to the country.

Does this mean that we should just let go of the problem of road and port congestion? The quick answer is no. There are immediate, medium-term and long-term solutions to the problem as indicated in the PIDS study, "A System-Wide Study

of the Logistics Industry in the Greater Capital Region”,<sup>7</sup> which provided the data and information for this chapter. There is no space to discuss those recommendations but it is instructive to find out how another big city, Bangkok, solved its own problem with road and port congestion (Box 1).

## Epilogue

On September 13, 2014, seven months after the passage of Ordinance No. 8366, the City of Manila lifted the truck ban indefinitely. But the damage to the economy has already been done. The economic cost was staggering, certainly not a trifling amount for a low middle-income economy. The economy’s reputation as an efficient production block in the regional value chains was in tatters. Nobody was made accountable for the bad decision. On September 16, 2014, the president issued Executive Order 172, which declared the Ports of Batangas and Subic as extensions of Manila ports during times when there is port congestion and other emergency cases to be determined by the Philippine Ports Authority.

This compromise solution ducked the issue. It did not recognize that the cause of road and port congestion was the presence of the main shipping port in the City of Manila. Well-known experts, JICA, and some government agencies discussed the need to expand the utilization of Batangas and Subic Ports in the interim, and a long-term view similar to what Bangkok did about a policy of expanding capacity ahead of demand. This policy should be part of a policy package to divert volume away from the Port of Manila and to compel shippers and consignees near these two ports to use them.

Meanwhile, the roads and the ports remain congested. Mothers will be late in picking up their daughters; salesmen will lose a sale, and possibly their job. Shipping companies will continue to dump empty containers in the port’s container yard. Cargo trucks will occupy the city streets, and in a sudden downpour, the world stands still. The logistics chain will not move. The economy and everyone loses. It is business as usual in the City of Manila.

---

<sup>7</sup> The reader is invited to read Patalinghug (2016) for details.

## References

- Japan International Cooperation Agency (JICA) and Department of Public Works and Highways (DPWH). 2010. The study of master plan on high standard highway network development in the Republic of the Philippines. Makati City and Manila, Philippines: JICA and DPWH.
- Patalinghug, E.E., G.M. Llanto, A.M. Fillone, N.C. Tiglao, C.R.P. Salazar, C.A.D. Madriaga, and M.D.G.T. Arbo. 2016. *Easing port congestion and other transport and logistics issues*. Quezon City, Philippines: Philippine Institute for Development Studies.

## Chapter 3

# The Impact of Legal Minimum Wages on Employment, Income, and Poverty Incidence in the Philippines

Vicente B. Paqueo, Aniceto C. Orbeta Jr.,  
and Leonardo A. Lanzona Jr.

### Abstract

It is commonly believed that mandating higher legal minimum wages (LMWs) is needed to help the poor earn a level of income that would allow them healthy and dignified lives. It is also seen as a tool to protect the weak against exploitation. This popular belief motivates and justifies the recurrent



“WORKERS REJOICE ON HIGHER WAGES”

demands for hefty increases in LMW. But what is the empirical evidence behind this? In fact, higher LMWs: (1) are likely to reduce the work hours of average workers; (2) can be disadvantageous against the very groups that LMWs are intended to protect; (3) decrease the employment probability of the young, inexperienced, less educated, and women laborers; and (4) tend to ironically reduce average income and raise household poverty rate. These results illustrate how raising LMWs can be counterproductive and can go against the spirit of equal protection principle of the Constitution. If the goal is to help the poor and protect the weak, then these findings warrant the reconsideration about the use of LMWs and consideration of other tools for achieving decent wages.

## Introduction

Poor households do not have much valuable physical assets to depend on. For their subsistence, they rely on the labor of their household members and their productivity in employment and other income-generating activities. Social assistance is often needed from the government, such as the *Pantawid Pamilyang Pilipino Program*, otherwise known as conditional cash transfer program discussed in Chapter 10 (Orbeta and Paqueo 2016) of this volume. Other sources are cash or lending assistance from relatives, friends, and other private entities.

To get themselves out of poverty, they need to increase their work hours and productivity, a key factor for higher wages. The problem, however, is that the Philippine labor population is not fully employed. This means that a certain percentage of the “working-age” Filipinos either belong to the categories of open unemployment or underemployment.

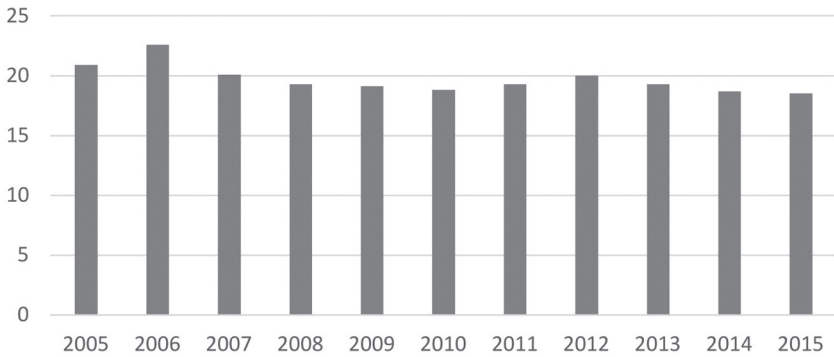
Open unemployment rate hovers at around 5.6 percent to 13.9 percent over 2002–2015.<sup>1</sup> For workers who are underemployed, they only work, on average, less than 40 hours a week.<sup>2</sup> Further, their wage rate is low due to productivity issues. In the Philippine labor context, the average percentage of underemployed workers (Figure 1a) is at 19.7 percent<sup>3</sup> for the past decade. Data show that the lowest underemployment, at 18.5 percent, occurred in 2015 but with minimal fluctuations.

<sup>1</sup> From Philippine Institute for Development Studies (PIDS) Economic and Social Database where open unemployment is 5.6 percent during fourth quarter of 2015 and 13.9 percent during second quarter of 2002.

<sup>2</sup> A typical workweek hours is equivalent to 40 hours.

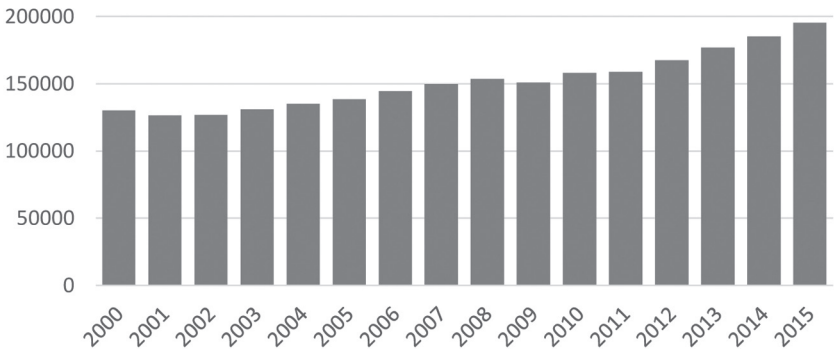
<sup>3</sup> Underemployment as of first quarter of 2016 is 19.7 percent. Source: PIDS economic and social database. <http://econdb.pids.gov.ph/tablelists/table/803> (accessed on April 7, 2016).

Figure 1. Annual underemployment rate, 2005–2015



Source: Philippine Institute for Development Studies (PIDS) Economic and Social Database

Figure 2. Labor productivity, PHP per person (at 2000 constant prices)



Source: Philippine Statistics Authority (n.d.)

Despite this, labor productivity<sup>4</sup> (Figure 2) is rising, while real average daily wages (Figure 3) declined from 2001 but is increasing since 2010, although its value in 2001 has not yet been regained. In fact, the minimum wage in the Philippines is relatively higher as compared to neighboring countries in Asia and the Pacific with low poverty rates like Thailand, Indonesia, and Viet Nam (Table 1).

<sup>4</sup> Labor productivity (at 2000 prices) as of 2015: 195,661.80; average hours of work (per week) as of July 2015: 42.4 hours; and average wage rate as of third quarter 2013: PHP 15,772 per month. Source: Philippine Statistics Authority (n.d.)

Figure 3. Real average daily wages from 2001 to 2015 (in PHP, 2006=100)



Source: Philippine Institute for Development Studies (PIDS) Economic and Social Database

Table 1. Comparison of minimum wages across countries

Minimum Wage (USD at 2005 prices)	
Country	Mean
Fiji	3,132
<b>Philippines</b>	<b>1,860</b>
China	1,728
Papua New Guinea	1,296
Indonesia	1,140
Thailand	852
Lao PDR	684
Cambodia	444
Viet Nam	408
East Asia and Pacific (developing)	888

Source: World Development Report (2013)

The *World Development Report 2013* took note of the fact that the Philippines has a higher minimum wage compared to economically advanced country like Thailand. This raises questions about the wisdom of setting large increases in legal minimum wages as a key to increase the incomes of poor households and to change their poverty status. Demanding the government to impose higher minimum wages to move the

poor out of poverty requires deeper thought. While keeping in mind the persistent appeal for rapid minimum wage increase, this paper looks into current data to see **how effective, in reality, is minimum wage legislation as a tool for improving the standard of living of the poor and other disadvantaged population groups.**

## The minimum wage law and its context

Consistent with the Constitution, the Labor Code of the Philippines was enacted in 1974. It sets forth the rules for hiring and termination of private employees, the conditions of work, employee benefits, and the guidelines in the organization and membership in labor unions as well as in collective bargaining. The code seeks to protect the poor against unfair labor practices, strengthen their bargaining power, and promote their standard of living.

Under the current labor regulations, employers face these three binding constraints (Felipe and Lanzona 2006):

- (1) Articles 234, 253A, 260 and 264, which regulate labor relations and protect permanent and unionized workers whose services cannot be terminated except for just and authorized cause subject to the requirement of due process in accordance with Article 278;
- (2) Article 106, which puts restrictions to subcontracting arrangements and Article 279, which mandates that an employer should offer permanent employment to a worker after a probationary employment period of six months (Article 281); and
- (3) Article 127, which establishes the minimum wage law prohibiting wages from going below a certain level and disallowing the diminution of benefits once awarded.

When minimum wage regulation was first set up in the 1950s, there was only one minimum wage set by Congress for the entire country regardless of regional and industrial differences. At the beginning during the early years of tripartite meetings (organized by the government, labor, and employers), the agreement was to aim for some form of indexed minimum wage package that would include benefits. In the end, the result was a “bilateral monopoly bargaining process” between the employer and organized workers on the wage package. This process, Lanzona (2014) observes, allowed the monopolists to keep their rents and permitted the organized workers



to receive a portion of such rents. Not surprisingly, a number of workers who were not part of the bargaining process were left unemployed or employed in marginal occupations.<sup>5</sup>

In July 1989, to appease other employers, protect workers, and spur regional development, the Congress enacted Republic Act (RA) 6727, which delegates Congress power to set minimum wages to the newly created Regional Tripartite Wages and Productivity Boards (RTWPPBs). The RTWPPBs are mandated to prescribe minimum wage rates for their respective regions while taking into account their regional conditions.

Decentralized wage setting was thought to be a more efficient approach for several reasons. In general, a decentralized system allows for minimum wages to be better aligned with local preferences and labor market conditions, which differ by regions. As Lanzona (2014, p. 1) argues:

.... An underdeveloped region can set lower minimum wages to attract new investments and thus move the region from a bad equilibrium (i.e., low density of economic activity and low employment) to a good equilibrium (i.e., high density of economic activity and high employment). In this case, the short-run efficiency costs of setting minimum wages could be small compared to the potential long-run benefits of moving to a better equilibrium.

At one time, there were over 200 legal minimum wages (LMWs), depending on type of industry and size of firm. Currently, there are about 51 LMWs (Table 2).<sup>6</sup> LMW is applicable to all firms with more than 10 workers. Moreover, enterprises with assets of less than PHP 3 million are exempted from LMW, provided they register with the Barangay Micro Business Enterprise.<sup>7</sup> In consideration of distressed enterprises, they can ask the secretary of Labor and Employment for a temporary minimum wage waiver. Relatively few firms, however, have enjoyed this waiver.

<sup>5</sup> Sicut (1986) noted that the timing of the institution of minimum wages coincided with import substitution policies and the state's bias against export-oriented labor-intensive industries. In time, these policies, by Sicut's reckoning, led to a greater application of mechanized operations at the expense of labor (a development favorable to monopolies during the time).

<sup>6</sup> NWPC (n.d.)

<sup>7</sup> RA 9178 exempts barangay micro business enterprises from the coverage of the minimum wage law. The potential effect of this exemption, however, is diluted by the provision in RA 9178 that all employees covered under this act shall be entitled to the same benefits given to any regular employee such as social security and health-care benefits.

Table 2. Current minimum wages in the Philippines (as of March 2016)

Region	Nonagriculture	Agriculture	
		Plantation	Nonplantation
NCR	444.00–481.00	444.00	444.00
CAR	265.00–285.00	255.00–270.00	255.00–270.00
I	227.00–253.00	233.00	227.00
II	247.00–255.00	235.00–243.00	235.00–243.00
III	306.00–357.00	291.00–327.00	279.00–311.00
IV-A	267.00–362.50	267.00–337.50	267.00–317.50
IV-B	217.00–285.00	225.00–235.00	225.00–235.00
V	248.00–265.00	248.00	248.00
VI	256.50–298.50	266.50	256.50
VII	295.00–353.00	275.00–335.00	275.00–335.00
VIII	260.00	241.00	235.00
IX	280.00	255.00	235.00
X	303.00–318.00	291.00–306.00	291.00–306.00
XI	317.00	307.00	307.00
XII	275.00	257.00	257.00
XIII	268.00	268.00	268.00
ARMM	265.00	255.00	255.00

NCR = National Capital Region; CAR = Cordillera Administrative Region; ARMM = Autonomous Region in Muslim Mindanao

Source: National Wages and Productivity Commission (n.d.)

The question at this point is: **To what extent is the minimum wage legislation being followed?** According to Department of Labor and Employment data, based on random inspection of firms, the rate of compliance with the minimum wage regulation is about 82 percent. However, critics think that the real compliance rate is much less than this figure.

The claim, however, that compliance rate is much less than 50 percent is grounded on data misinterpretation. It is true that, as also noted by Paqueo et al. (2014), 35 percent of workers earn less than the subsistence income. But part of the reason is that 43.5 percent of employed labor are self-employed or informal sector workers.<sup>8</sup>

<sup>8</sup> DOLE (2008)

## Conflicting hypotheses about the LMW effects

At first glance, it would appear that workers' household incomes could be increased by mandating large increases in LMWs. Many have, therefore, jumped to the conclusion that raising LMWs is a way to provide workers a family living wage needed to exit poverty. The implicit assumption is that LMWs have little, if any, impact on the total employment rate. It is important to verify this assumption because if this is wrong, and in fact LMWs have significantly large negative impact on employment rate, then a high LMW policy could unintentionally hamper rather than facilitate the movement of households away from poverty.

Standard textbook analysis would argue that under a perfectly competitive market, **an increase in LMW will reduce a firm's level of employment**. This is based on the assumption that the market consists of many small firms and that no single firm is able to exercise any significant influence on the wage rate it pays to its workers. To understand this better, imagine each firm under this market situation as an individual price taker—the price of labor being the market (not minimum) wage rate. The interactions of all employers and workers taken together determine the wage rate in this scenario.

A typical profit-maximizing firm in this situation expands its number of workers for as long as the cost of hiring an additional worker is less than the additional revenue he produces for the firm. That is to say, a firm will hire additional workers for as long as they add to the firm's profit. **It stops hiring when the firm can no longer earn additional profit from hiring more workers.** At this point, the firm no longer has any incentive to expand employment. At break-even, therefore, the wage rate a worker receives from the firm (fixed by the market, not minimum) is equal to the value of his contribution to the firm's total revenue.

Imagine now that government mandates all firms to pay their workers a minimum wage of at least LMW set above the market wage. This policy will induce the above firms to lay off some of its workers. This is because continuing to employ them would cost the firms more than the revenues they are expected to bring in.<sup>9</sup> Therefore, in a perfectly competitive model, a high LMW set at a level above the market wage rate would have a negative (albeit, unintended) consequence on workers' employment.

The textbook analysis assumes that all workers are the same; but what if workers differ in their productivity (actual or perceived) and that they can be arranged from lowest to highest level of productivity? A firm has 1,000 workers and that 30 percent

---

<sup>9</sup> This result is due to the law of diminishing marginal returns.

of them earn the minimum wage rate of say PHP 100 per day, which is the additional revenue a minimum wage worker brings to the firm's coffers. What would happen if the government mandates a higher LMW of say PHP 200? This new mandate arguably would induce a profit-maximizing firm to lay off at least 30 percent of the workers, as it would now have to pay the minimum wage to workers an amount far greater than what they would add to the firm's total revenue. Laying them off would save the firm some money.

A further implication is that the higher LMW would induce disemployment effects that are discriminatory against workers with weaker credentials and lower human capital. That is, firms would first lay off workers with no work experience, low education, low training, and other characteristics associated with low human capital. The welfare of workers, particularly the poor, the less educated, the young, and women, could be seriously hurt. This contradicts the intention of government mandates and regulations to curb presumed employers' abuses, monopsony power, where there is only one buyer and unfair bargaining advantage over individual workers.

Moreover, it can be argued that high minimum wages in conjunction with other restrictive laws, such as the six-month regularization rule,<sup>10</sup> could result in discouraging firms from investing in on-the-job training. This is because such laws prevent firms from regaining their investments in training the young and inexperienced. As a result, the disadvantaged group experiences inadequate skills formation and high unemployment rate.

Many economists question the realism of textbook analysis. They argue that in the real world, a firm has some control over the wage rate it pays its workers. There are several hypotheses on this score. One idea is that by giving a higher wage rate, a firm can increase workers' morale and, therefore, work effort and productivity. The firm can also reduce turnover rates, which can be costly. Another idea, especially relevant in poor communities, is that by giving higher wages, a firm can improve workers' health and nutrition and, consequently, their level of energy and work effort.

In both cases, a profit-maximizing employer determines not just the level of labor inputs but also the wage rate of its workers (fixed in the standard competitive model). In this alternative model, an employer limits the number of workers to a point where hiring more laborers would no longer contribute any additional profit to the firm. As in the standard textbook analysis, their additional contribution to the firm's total revenue at equilibrium is just equal to the additional cost of employing them.

---

<sup>10</sup> Further discussed in Chapter 5 of this volume.

But here, unlike in the standard model, the wage rate that the employer pays its workers is less than the value of its contribution to the firm's total revenue.<sup>11</sup> **Hence, in a situation where the firm has control of its workers' wage rate, it earns excess profit over what it would have realized if the firms were in a perfectly competitive market.**

What then would be the impact of LMW on employment under this scenario? Imagine again that LMW is set at a level  $LMW$  where the employer is compelled to pay its workers a higher wage rate equal to the amount that would have emerged in a perfectly competitive market (a firm is a price taker). This government intervention would induce the firm to employ more workers up to the point where cost of hiring an additional worker at  $LMW$  would be equal to his revenue contribution.<sup>12</sup> If, however, the  $LMW$  is set at a much higher level than  $LMW$ , the firm could be pushed to disemploy some workers.

Yet another view on the impact of  $LMW$  is its so-called "cleansing effect". The hypothesis here is that the introduction of a high  $LMW$  will cause the weeding out of low-productivity firms and push firms to be more efficient, resulting in resources moving from less to more productive enterprises and industries. Eventually, the "cleansing" of the economy could result in the expansion of more and better jobs.<sup>13</sup> Arguably, this positive employment impact is likely to be obtained in the context of a dynamic economy that has a general policy environment favorable to technological change and investments.

To round out the discussion in this section, we agree that worker protection is desirable not only for its social value but also for facilitating skills formation. Ensuring workers of their respective jobs creates incentives for them to learn more firm-specific skills and in the process be more productive. **Protectionism, however, can be overdone and cause deleterious effects on the industry and, hence, increase unemployment and eventually reduce skill formation.** Just like medicine, when abused, it can be worse than the disease.

---

<sup>11</sup> Villanueva (1996) estimates that in the Philippines the value of an average worker's contribution to the firm's total revenue is more than the wage rate that the employer pays its workers. He, therefore, concludes that raising the minimum wage should increase rather than decrease employment. Unfortunately, he did not empirically test the impact of  $LMW$  on employment.

<sup>12</sup> The textbook case of a monopsony, where the labor market has only buyer, yields a similar analytical result.

<sup>13</sup> On a discussion of the "cleansing effect" of  $LMW$  and the empirical evidence in China, see Mayneris et al. (2014).

## Empirical evidence on LMW impact

It is clear that, theoretically, the impact of LMW on employment can be positive, negative, or insignificant depending on the actual situation facing the employer and on the level of LMW. This theoretical result implies that the question about the impact of LMW on employment and, therefore, household income and poverty, can be resolved only empirically. This section now presents empirical evidence on the effects of LMW on hours of work, employment and household income, and poverty incidence.

International studies reviewed by the World Bank (2013) found that the impact of LMW on employment is mixed. A similar conclusion was reported by Canales (2014) who, however, noted in addition that the LMW employment effects are generally negative in developing countries.

Studying the case in the United States (US), Brown et al. (1983) estimated the elasticity of teenage employment with respect to the minimum wage. They found that a 10-percent increase in the minimum wage reduced teenage employment by up to 3 percent. Some authors find positive estimates of employment elasticity with respect to minimum wages. In particular, a 10-percent increase in the minimum wage increased employment by around 3.5 percent (Card 1992), 7.3 percent (Card and Krueger 1994), and even up to 17–26.5 percent (Katz and Krueger 1992). Brown (1999), in his review of minimum wage literature in the US, concluded that the minimum wage effect was modest.

To illustrate the impact of LMW in developing countries, several studies in South America and one in Indonesia traced its negative effects on employment. The study of Castillo-Freeman and Freeman (1992) was able to observe large reductions in employment in very small industries in Puerto Rico. LMW found modest effects on employment, that a 10-percent increase in minimum wages will reduce only 1 percent of employment. Another study, this time by Montenegro and Pages (2004) in Chile, also found detrimental effects of minimum wages in such a way that instead of a reduction in employment, available employment are shifted from young and unskilled workers to older and female workers.

Gindling and Terrell (2007) found negative impacts of minimum wages on employment in Honduras. Their estimates claim that a 10-percent increase in minimum wages reduces employment by 4.6 percent. According to Sugiyarto and Endriga (2008), doubling of minimum wage in Indonesia could decrease the employment of unskilled workers by 2 percent. In addition, the doubling of minimum wages also decreases the provision of in-house training to unskilled workers by 34–39 percent.

In the Philippines, hours of work significantly declined, and the probability of gaining or retaining employment fell from 8 percent to 22 percent following an increase in LMW (Canales 2014). These adverse employment effects are inconsistent with the predictions of models where firms have control over their workers' wage rates. Her conclusion: the Philippine labor market as a whole is better described as competitive rather than monopsonistic.

Another study by Lanzona (2012) showed that the LMW had a “significant” negative impact on employment rate of all individuals, notably among the young, inexperienced, less educated, and women. These groups presumably showed lower productivity relative to their older, more educated, experienced, and male competitors for jobs. Using the fixed effects model alone, an increase in LMW of 10 percent would lead to declines in employment rate (negative elasticities) by -6.36 percent (for all workers), by -5.97 percent and -3.64 percent (among teenagers and young adults relative to 50 years old and over), and by -2.36 percent (no schooling relative to college educated).

The average real income of households would have grown faster by about 20 percent—and household poverty would have been lower—if the LMW had increased more slowly over time (Paqueo et al. 2014). The total income of a household with just one minimum wage earner is likely to be smaller than a household where the wife and the older children can also work but at lower, market-determined wages. Interestingly, the study finds that a faster rise in LMW significantly increases poverty incidence by 1.7–3.0 percentage points.

The LMW had a “significant” adverse impact on employment by smaller firms, those with average assets below PHP 1.1 billion (Lanzona 2012, Table 3). In contrast, larger companies (asset size above PHP 1.1 billion) showed much smaller negative, and even some positive, elasticities. These might be monopsonists who enjoy greater hiring leeway because of their size and market presence (Lanzona 2012).

## Conclusion

The Philippines has learned to grow its aggregate output faster and more sustainably in recent years. But it still has to learn how to achieve sustained reduction in the incidence rate of poverty. On this question, many believe that increases in minimum wages would significantly reduce poverty by raising workers' earnings without decreasing employment opportunities.

**In theory, the impact of LMW on employment can be positive, negative, or zero depending on one’s assumptions about the market situation and the underlying mechanisms governing wages and employment decisions.** A review of the empirical studies that were rigorously done using Philippine data show, however, **that increases in LMWs have had statistically and quantitatively significant negative impact on employment and hours of work.** Equally worrisome, those LMW increases have had disproportionate unfavorable and discriminatory effects on the employment opportunities of disadvantaged population subgroups. Further along, larger increases in LMWs tend to reduce average household income and raise the prevalence rate of poverty.

**A lesson learned here is the danger of basing policy decisions on empirical results drawn from foreign experience without validating their applicability to local conditions.** Such practice often leads to detrimental (albeit, unintended) consequences.

Another lesson is the need to temper the impact of LMW increases. On this score, there is wisdom in the policy view of government to temper demands for large rises in LMW. It is to government’s credit to temper the effects of LMW by decentralizing the setting of minimum wages to regional authorities to take into account differences in regional conditions. It is also laudable that their decisions on LMW adjustments have been based to some extent on productivity growth and price inflation. Arguably, though, there is room for improvement in making those decisions.<sup>14</sup>

Having said the above, it is important to stress that the government has yet to recognize and address the need to temper the discriminatory impact of LMWs on the employment opportunities of disadvantaged population groups. These are the poor, the young and inexperienced, the less educated, and women—workers that have relatively lower human capital. In this regard, **it would be desirable to develop and test compensatory interventions that would reduce, if not completely reverse, the discriminatory effects of LMWs to promote greater inclusiveness.**

Equally important is the need to study empirically the impact of tightening the design and implementation of the current six-month regularization law and “labor contractualization”.<sup>15</sup> During the recent presidential election season, many influential politicians promised to adopt more stringent measures to ensure that

---

<sup>14</sup> In her analysis of the determinants of LMWs, Bersales (2014) finds that though productivity growth and inflation are good determinants of minimum wages, other adjustments must still be made. Several criteria used in the Wage Rationalization Act or RA 6727 have not been included in the formula due to the unavailability of data.

<sup>15</sup> Further discussed in Chapter 5 of this volume.



those regulations are effectively implemented and enforced. What is concerning in this regard is the lack of studies on the impact of those regulations. Such studies, using Philippine data, are needed in view of recent findings about the potentially detrimental effects of those regulatory measures on employment opportunities, particularly of disadvantaged workers. A recent study<sup>16</sup> of the experience of developed countries suggests that banning temporary employment or mandating firms to “regularize” or fire workers after only a few months of work can potentially exacerbate the unfavorable employment effects on LMWs.<sup>17</sup> It would be useful to validate the abovementioned studies to inform public decisions about those issues and avoid unintended consequences.

## References

- Bersales, L.G.S. 2014. Determinants of regional minimum wages in the Philippines. Paper for the BSP Centennial Professorial Chair 2014, December 2014, Bangko Sentral ng Pilipinas, Manila, Philippines.
- Brown, C., 1999. Minimum wages, employment, and the distribution of income. In *Handbook of labor economics* Vol. 3B, edited by O. Ashenfelter and D. Card. Amsterdam, The Netherlands: Elsevier.
- Brown, C., C. Gilroy, and A. Kohen. 1983. The effect of the minimum wage on employment and unemployment. *Journal of Human Resources* 18(1):3–31.
- Canales, K.L.S. 2014. The effects of a minimum wage on employment outcomes: An application of regression discontinuity design. *The Philippine Review of Economics* 51(2):97–120.
- Card, D. 1992. Do minimum wages reduce employment? A case study of California, 1987–1989. *Industrial and Labor Relations Review* 46(1):38–54.
- Card, D. and A.B. Krueger. 1994. Minimum wages and employment: A case study of the fast-food industry in New Jersey and Pennsylvania. *American Economic Review* 84(4):772–793.
- Castillo-Freeman, A. and R. Freeman. 1992. When the minimum wage really bites: The effect of the U.S.-level minimum on Puerto Rico. In *Immigration and the workforce: Economic consequences for the United States and source areas*, edited by G.J. Borjas and R.B. Freeman. Chicago, IL: University of Chicago Press.
- Department of Labor and Employment (DOLE). 2008. Workers in the informal economy. Manila, Philippines: DOLE. <http://www.dole.gov.ph/fndr/bong/files/Workers%20in%20the%20Informal%20Economy.pdf> (accessed on April 7, 2016).

<sup>16</sup> Lepage-Saucier et al. (2013) argue that the elimination of temporary contracts decreases total employment by 7 percentage points.

<sup>17</sup> Under conditions of high LMW, it can be argued that the cost of hiring and then firing a worker who turns out to be unproductive is greater with higher LMWs. Therefore, a risk-averse firm would be discouraged from trying out and hiring workers with more uncertain qualifications, in particular, workers with little work experience and without credentials from well-known good quality schools—meaning the poor and the young.

- Felipe, J. and L. Lanzona Jr. 2006. Unemployment, labor laws, and economic policies in the Philippines: A stocktaking review. In *Labor markets in Asia: Issues and perspectives*, edited by J. Felipe and R. Hasan. Hampshire, England: Palgrave and McMillan.
- Gindling, T.H. and K. Terrell. 2007. Minimum wages and the welfare of workers in Honduras. IZA Discussion Paper No. 2892. Bonn, Germany: Institute for the Study of Labor.
- Katz, L.F. and A.B. Krueger. 1992. The effect of the minimum wage on the fast-food industry. *Industrial and Labor Relations Review* 46(1):6–21.
- Lanzona, L.A. Jr. 2012. The impact of minimum wages on output and employment in labor-intensive manufacturing industries in the Philippines. Background paper prepared for the *Philippine Development Report 2013*, World Bank.
- . 2014. Effects of minimum wage on the Philippine economy. PIDS Policy Notes No. 2014-15. Makati City, Philippines: Philippine Institute for Development Studies.
- Lepage-Saucier, N., J. Schleich, and E. Wasmer. 2013. Moving towards a single labour contract: pros, cons, and mixed feelings. OECD Economics Department Working Papers No. 1026. Paris, France: OECD Publishing. <http://dx.doi.org/10.1787/5k4c0vvc4zxv-en> (accessed on April 7, 2016).
- Mayneris F., S. Poncet. and T. Zhang. 2014. The cleansing effect of minimum wage: Minimum wage rules, firm dynamics, and aggregate productivity in China. CEPII Working Paper No. 2014-16. Paris, France: Centre d'Etudes Prospectives et d'Informations Internationales.
- Montenegro, C. and C. Pages. 2004. Who benefits from labor market regulations? Chile, 1968–1988. In *Law and employment: Lessons from Latin America and the Caribbean*, edited by J. Heckman and C. Pages. Cambridge, MA: National Bureau of Economic Research.
- National Wages and Productivity Commission (NWPC). n.d. Statistics. Manila, Philippines: NWPC. [http://www.nwpc.dole.gov.ph/pages/statistics/stat\\_current\\_regional.pdf](http://www.nwpc.dole.gov.ph/pages/statistics/stat_current_regional.pdf) (accessed on April 7, 2016).
- Orbeta, A.C. Jr. and V.B. Paqueo. 2016. *Pantawid Pamilya Pilipino Program: Boon or bane?* PIDS Discussion Paper No. 2016-56. Quezon City, Philippines: Philippine Institute for Development Studies.
- Paqueo, V.B., A.C. Orbeta Jr., L.A. Lanzona Jr., and D.G.C. Dulay. 2014. Labor policy analysis for jobs expansion and development. In *Economic Policy Monitor 2013: Addressing the jobs challenge toward inclusive growth*. Makati City, Philippines: Philippine Institute for Development Studies.
- Philippine Statistics Authority (PSA). n.d. <https://psa.gov.ph/content/employment-rate-estimated-935-percent-july-2015> (accessed on April 7, 2016).
- Sicat, G. 1986. A historical and current perspective of Philippine economic problems. PIDS Monograph Series No. 86-11. Makati City, Philippines: Philippine Institute of Development Studies.
- Sugiyarto, G. and B.A. Endriga. 2008. Do minimum wages reduce employment and training? ADB-ERD Working Paper Series No. 113. Mandaluyong City, Philippines: Economics and Research Department, Asian Development Bank.
- Villanueva, D. 1996. Social and political factors in a model of endogenous economic growth and distribution: An application to the Philippines. IMF Working Paper No. 96/139. Washington, D.C.: International Monetary Fund.

World Bank (WB). 2012. *World Development Report 2013*. Washington, D.C.: WB.

———. 2013. *Philippine Development Report 2013: Creating more and better jobs*. Taguig City, Philippines: WB Philippines.

## Chapter 4

# Trading Off Worker Flexibility for Job Security: Missed Opportunities for More and Better Jobs

Leonardo A. Lanzona Jr. and Vicente B. Paqueo

### Abstract

Fiscal incentives were proposed as a measure to help small-scale private enterprises to develop and flourish, and by doing so, provide employment for the greater population. Given this premise, growth and development of small enterprises carry the hope for inclusive economic development. Considering the impressive economic growth of recent years, this



chapter examines whether the fiscal incentive program provided greater employment opportunities. Ironically, it turns out that instead of increasing employment, the fiscal incentive program provided limited labor market opportunities given the existing labor market regulations that emphasized job security instead of worker mobility. Despite its good intentions, the government missed several opportunities to enlarge the labor market by retaining obsolete restrictions while introducing new innovations.

Politicians and policymakers liberally promise their constituents to provide jobs, but delivering on this promise would be much more complicated. With the good intentions of making industry development more inclusive and sustainable, the government supported the growth of micro, small, and medium enterprises (MSMEs) through various programs, including particularly the *2014–2016 Investment Priorities Plan*. The plan was designed to enhance the sector and to ensure vertical linkage of MSMEs with other larger firms within a value chain system.

The idea is to stimulate and facilitate MSME development by providing appropriate innovation incentives to selected industries. These incentives would be provided in the form of grants, loans, innovation vouchers, and counterpart funding to innovative firms. Complementing these incentives is technical assistance to promote long-term research collaboration between universities and business.

Several MSME industries have been identified as priorities for expansion and development. Largely, these industries are substantially labor intensive.<sup>1</sup> This prioritization scheme is expected to encourage employment of labor and, therefore, promote inclusive and sustainable economic growth.

From the list of priorities, fiscal incentives are to be granted to enterprises that venture into these priority areas, provided they qualify for certain criteria and fulfill the terms and conditions of their registration. Labor employment is the main criterion, and the focus on labor-intensive industries appears reasonable and appropriate, given the country's abundant labor resources. Nevertheless, the issue remains whether the design of the incentives provided is appropriate for getting selected labor-intensive industries to expand job creation.

In that regard, for qualified enterprises, the incentives they would receive include income tax holiday (from four years to maximum of eight years), provided they meet the targets of its project. Registered projects also have the privilege of importing capital goods free of duties, making capital inputs cheaper to those projects. Other

---

<sup>1</sup> This term refers to the amount of labor used per unit of output produced.

forms of assistance are provided to registered enterprises to help ease their way into the business environment.

This paper empirically examines the impact of the aforementioned incentives on employment. Notwithstanding the general attractiveness of the incentives being provided, the argument here is that contrary to the good intentions of those incentives, employment may be reduced in favor of greater capital because of adverse incentive design arising from labor market regulations.

## MSME challenge to development

Historically, the Philippine manufacturing industry developed under an environment of policies of protection, regulation, and promotion. The policies like import substitution along with regulation, promotion, and protection allowed local manufacturers to compete against imports and achieve economies of scale. While these policies increased in investments during the early years of industrialization, they have now become barriers to resource mobility and competition. These policies also failed to provide an efficient mechanism for resource allocation. As a result, these highly concentrated industries are dominated by oligopolists and monopolists (Patalinghug 1983; Aldaba 2000, 2003).

Table 1. Breakdown of enterprises in the Philippines

	Firms	Employment	Firm to Employment Ratio
Large	3,023	2,136,362	1:707
Medium	2,786	386,163	1:139
Small	61,979	1,417,672	1:23
Micro	709,899	1,792,100	1:2

Source: 2010 List of Establishments, National Statistics Office (NSO)

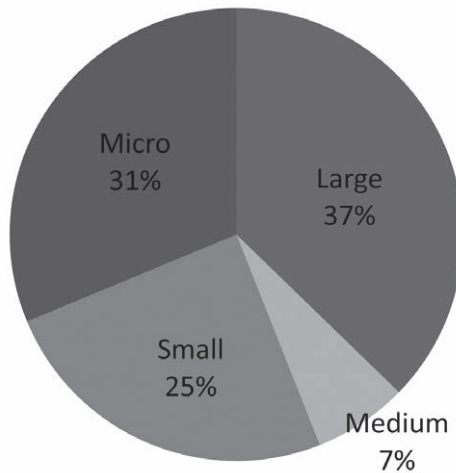
In order to survive against these monopolistic Goliaths, multiple Davids in the form of MSMEs try to engage in the market, and the size of the MSME<sup>2</sup> sector itself has been used as a justification for subsidizing it. As of 2010, there were a total of 777,687

<sup>2</sup> An MSME in the Philippines is defined as any business activity or enterprise engaged in industry, agribusiness, or services that has: (1) an asset size (less land) of up to PHP 100 million and (2) an employment size with less than 200 employees. The small industries have been divided into two: the microenterprises (1–9 employees) and the small enterprises (10–99 employees).

business enterprises in the Philippines (Table 1). Of this figure, MSMEs represented 99.6 percent with 774,664 establishments while large enterprises represented 0.4 percent with 3,023 establishments.

In terms of employment generation, MSMEs provided 62.3 percent of the total jobs generated by all types of business establishments and, in contrast, large enterprises contributed 37 percent to the total (Figure 1).

Figure 1. Employment by firm size



Source: 2010 List of Establishments, NSO

Small and medium enterprise (SME) employment by industry generally follows the same structure as the number of establishments per industry, with SMEs engaged in the wholesale and retail trade generating 1,237,917 jobs followed by 617,634 jobs in manufacturing, and 479,668 jobs in hotels and restaurants.

The data show two glaring facts. First, despite the fact that MSMEs comprise roughly 99 percent of the total enterprises in the country, these enterprises do not generate as much employment as the larger firms. Second, the largest proportion of the jobs in the MSME sector is found in the wholesale/retail trade and repair services, where jobs are mainly of low quality, characterized by limited skills, and low productivity (Table 2).

## Can MSMEs drive economic growth?

Apart from employment generation, SMEs are expected to drive economic growth by: (1) stimulating innovation, (2) acting as a competitive spur to existing businesses to

Table 2. Number of employees by industry and firm size

	Micro	Small	Medium	MSMEs	Large	Total
Agriculture, hunting, and forestry	9,855	31,213	16,515	57,583	81,594	139,177
Fishing	3,408	5,705	4,377	13,490	14,227	27,717
Mining and quarrying	930	3,878	1,960	6,768	21,201	27,969
Manufacturing	259,204	244,156	114,274	617,634	685,410	1,303,044
Electricity, gas, and water	2,608	20,924	17,086	40,618	56,397	97,015
Construction	5,305	27,781	17,391	50,477	92,819	143,296
Wholesale/Retail trade; repair services	816,095	364,164	57,658	1,237,917	139,032	1,376,949
Hotels and restaurants	233,525	224,963	21,180	479,668	22,883	502,551
Transport storage and communications	26,161	49,399	16,671	92,231	106,331	198,562
Financial intermediation	80,706	85,395	12,377	178,478	152,970	331,448
Real estate, renting, and business activities	109,214	122,428	46,104	277,746	578,239	855,985
Education	31,516	154,515	37,695	223,726	98,770	322,496
Health and social work	51,006	35,240	15,615	101,861	57,000	158,861
Other community social and personal service activities	99,567	47,911	7,260	154,738	29,489	184,227
Total	1,729,100	1,417,672	386,163	3,532,935	2,136,362	5,669,297

MSMEs = micro, small, and medium enterprises

Source: 2010 List of Establishments, NSO



increase their productivity, and (3) making a disproportionately large contribution to job creation.

MSMEs are expected to stimulate innovation because of the idea that its potential is greater in smaller firms. Examining United States' firms, Acs and Audretsch (1987) find that small firms have higher innovation rates in high-technology, skill-intensive industries and larger firms have the innovative edge in lower-technology, capital-intensive industries. In developing countries, however, researchers find that large exporting firms are typically the primary mechanism through which technologies are adapted from abroad to local circumstances (see Pack and Westphal 1986 and Pack 1992 for Asia; and Biggs et al. 2002 for sub-Saharan Africa). In the Philippines, Aldaba (2009) finds that the deepening of high-technology industries has remained weak due to limited backward linkages and low value additionality of high-technology export products. Thus, from a developing country perspective, the firm-level evidence does not favor SME subsidization as a mechanism for boosting innovation and productivity growth.

MSMEs conceptually spur competition, which raises productivity and, in turn, stimulates economic growth. This concept of *creative destruction*, a widely recognized principle proposed by the economist Schumpeter, explains how new innovative entrepreneurs challenge incumbent businesses. As competition increases, there is 'churn' in the market; the least productive firms exit and the most productive firms grow, resulting in an increase in aggregate productivity.

However, in the Philippines, the overall economic performance of SMEs in the last decade has remained weak even though there have been some notable improvements registered in the number of enterprises, value additionality, and employment. They have not substantially generated sufficient value additionality and employment to increase competition, improve industrial structure, or increase the country's overall manufacturing growth (Aldaba and Aldaba 2014). Despite the substantial trade and investment liberalization in the country along with increasing regional integration, penetrating the export market has not been easy for SMEs. Making MSMEs internationally competitive remains a major challenge in the Philippines. This is especially true in light of rising globalization trend and increasing economic integration, not only in the Association of Southeast Asian Nations but also in the East Asian region.

The evidence previously presented shows that small firms make a disproportionately large contribution to job creation, given the percentage of the workforce they employ. In aggregate, MSMEs make a rather static contribution to the economy. Although they employ a significant proportion of people (Tecson

2004), they do not contribute a big share to employment growth. Many only have a relatively short life expectancy, perhaps three to five years, although this depends on the economy. Most of these MSMEs are presently in the “at risk” or “insulated” categories, and the main issue that they face is how to best adapt to the increasing competitive pressures occasioned by open regionalism.

There is inconclusive data concerning the ability of small firms to achieve the potentials necessary to drive economic growth, especially in the case of the Philippines.

## **How is the labor market regulated in the Philippines?**

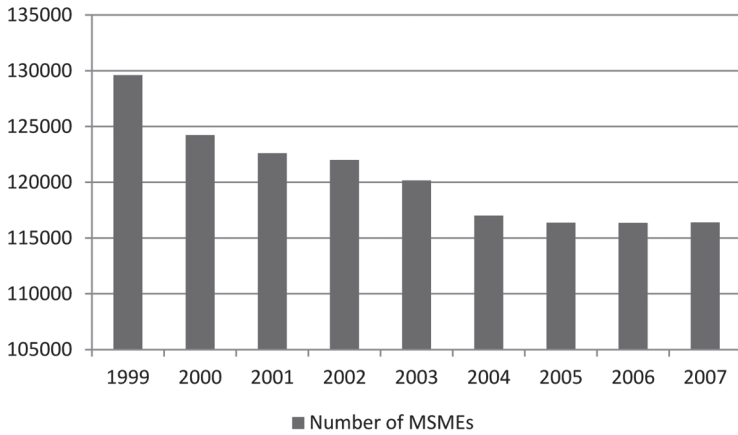
Labor market regulations in the Philippines have two main goals: first is to distribute the benefits of economic growth and second is to ensure the security of workers (for deeper discussion, see Chapter 5) especially since various types of policy protection measures existed for companies during the Marcos dictatorship (Sicat 1986). However, these regulations are now considered restrictive, particularly with trade restrictions dismantled and new forms of social protection implemented. Since these regulations remain in force, the market power of large, capital-intensive firms will continue to grow.

For concreteness in discussion, this chapter focuses on minimum wages, but it needs to be stressed that the full impact of these regulations points to the interaction of all regulatory constraints. For instance, it can be argued that high minimum wages, in conjunction with other laws, prevent firms from recouping their investments in training the young and inexperienced. This results in firms not investing enough in on-the-job training for the youth who end up with inadequate skills formation and who are ultimately unemployable—contributing to high unemployment rate. Worker protection is desirable not only for its social value but also for the incentives it creates for workers to learn more firm-specific skills, and in the process, to be more productive.

Today, the Labor Code fails to accommodate the proliferation of a significant number of MSMEs, and the interactions of these regulations with the minimum wages can weaken these smaller firms—at worst, cause them to close shop. With the reduction of MSMEs, the unemployed are excluded from the benefits arising from general economic growth. Firms and workers find it difficult to arrange varied forms of compensation that may include training.

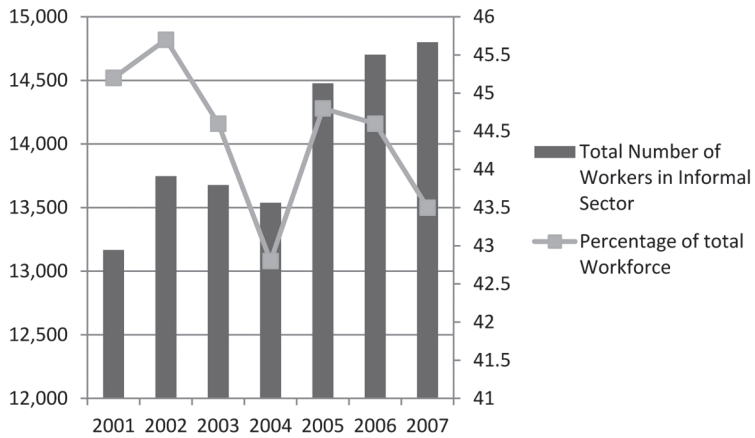
Data show that increases in informal industries are correlated with the decrease in MSMEs (Figures 2 and 3). Based on the last survey on the informal sector conducted

Figure 2. Number of MSMEs, 1999–2007



MSMEs = micro, small, and medium enterprises  
 Source: Annual Survey of Establishments, Philippine Statistics Authority (PSA)

Figure 3. Workers in the informal sector



Source: Informal Sector Survey, PSA

in 2008, the workers engaged in this sector comprise roughly 46 percent of the Philippine labor employment, with the numbers increasing as a result of a larger labor force. This coincides with the decreases in MSMEs during the period. Self-employment is prevalent because it is more difficult to enter into long-term formal wage employment than to set up one's own business. The poor would voluntarily choose to be engaged in various kinds of entrepreneurial activities as a way of minimizing risks and maximizing the use of their time.

However, over the years, the weight of the labor markets has become considerable. The annual increases in the regulated wages have taken a toll on the demand for workers. Comparing minimum and average market wages from 2004 to 2014 across regions shows that minimum wages are greater than the average market wage (Figure 4). This indicates that the indicated minimum wages are not really the *minimum wage*, but instead the benchmark for the wages offered to the workers. In turn, the bargaining power of unions, which recently has substantially waned not only in the Philippines but also in other parts of Asia, rests primarily on these minimum wages.

In effect, these regulations are binding and can cause a sizable increase in the costs of labor. As Squire and Suthiwart-Narueput (1997) point out, the likelihood of noncompliance will be greatest when the regulations are binding and the relevant elasticities are sizable. If the distortionary costs of regulations are not rendered insignificant, then the returns to noncompliance will be high and employers will either evade or avoid the regulations. In this scenario, regulations minimize impact on efficiency but cause significant declines in the demand for labor.

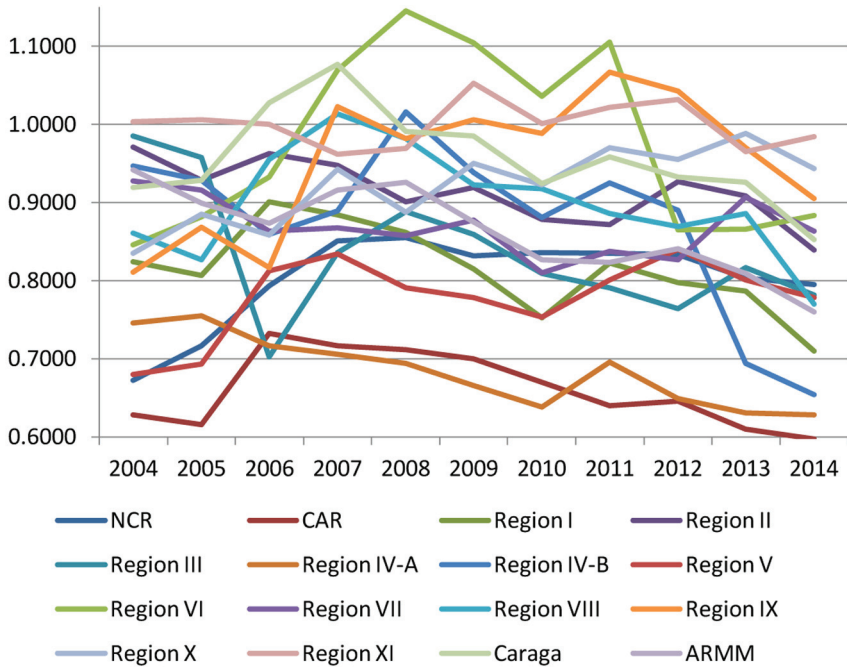
One particular way in which firms can evade the costs but comply with the restrictive labor market regulations is by increasing the use of capital. This means that firms adopt a higher capital labor ratio in an effort to minimize their average costs even as they pay for the minimum wages. Another option is to avoid the labor market regulations by hiring or subcontracting part-time workers. In effect, firms are able to reduce their total labor costs as they would no longer pay for the additional benefits that are offered to the permanent workers.<sup>3</sup>

These options, however, are more easily implemented by the larger firms as these fundamentally require some form of additional investments. Increasing capital and subcontracting other agencies to hire temporary workers will entail resources

---

<sup>3</sup> Another option is to evade minimum wages by illegally paying lower wages to workers. Given higher penalties for violating minimum wages, this seems less probable in the country. While the compliance to the whole labor market regulations is about 60 percent, the compliance rate for minimum wages is 80 percent. This means that firms would rather violate other labor regulations than minimum wages.

Figure 4. Proportion of minimum wages to average market wage per region



NCR = National Capital Region, CAR = Cordillera Administrative Region, ARMM = Autonomous Region in Muslim Mindanao

Source: Labor Force Surveys, National Wages and Productivity Commission and PSA

that are unavailable to MSMEs. Upon reaching scale economies, these investments will yield lower average costs. Lanzona (2014) found some evidence that firms with higher than average capital base are not adversely affected by the minimum wages, but smaller firms will tend to lay off workers, including their nonproduction workers. In the process, these large capital-intensive firms end up controlling the labor market.

Such market power may be the result of the firm being the sole employer in the market. In this case, firms face higher marginal labor costs as they increase their demand. Firms face an upper-sloping marginal cost of labor, but regulations, such as the minimum wage, flatten out this curve making it profitable to increase employment. However, this theory is based on partial equilibrium analysis. In which case, the model cannot consider the feedbacks as the regulation could, in effect,

reinforce the monopsony because other firms, particularly the less capital intensive, may not survive such regulations.

## Using incentives to eliminate effects of regulations

Historically, industrial development had been heavily biased in favor of developing the national economy mainly for domestic Filipino enterprises. This has roots, not only in the Filipino First policies of the 1950s but, more significantly, in the restrictive constitutional provisions affecting foreign capital.

The Board of Investments (BOI) started a program to give fiscal and nonfiscal incentives to attract foreign investments and participate in export processing zones (EPZs). But the original purpose of the EPZs, and especially the incentives, was fundamentally to eliminate the effects of regulations on the emerging and new firms, as a way of addressing the long history of economic protectionism. This reflects a second-best approach that intends to lower cost of production for small firms and to correct the decades-long practice of favoring large, domestic firms.

Since EPZs geographically limited the benefits of the program, BOI started to offer incentives to firms outside of the zones. Firms will have to show strong income-generating potential<sup>4</sup> to be qualified. The BOI requires a 15-percent return on investment to continue availing of the incentives. While these requirements may seem stringent, these are intended to target firms with strong potential and to limit the incentives to a selected number of industries.

---

<sup>4</sup> For income tax holidays, the following requirements are stipulated:

- a) The indigenous raw materials used in the manufacture of the registered product must at least be 50 percent of the total cost of raw materials for the preceding years prior to the extension unless the board prescribes a higher percentage;
- b) The ratio of total imported and domestic capital equipment to the number of workers for the project does not exceed USD 10,000 to one worker; and
- c) The net foreign exchange savings or earnings amount to at least USD 500,000 annually during the first three years of operation. In no case shall the registered pioneer firm avail of the income tax holiday for a period exceeding eight years.

In addition, the program has an exit component. Again for income tax holiday, the incentive will be available for:

- a) New projects with a pioneer status for six years;
- b) New projects with a nonpioneer status for four years; and
- c) Expansion projects for three years, exemption is limited to incremental sales revenue/volume.

The general concept is incentives are intended to establish the new projects, especially the MSMEs, given a fixed period of time. The investment incentive system attempts to maximize the increase in investments through the granting of fiscal incentives and a listing of priority areas eligible for these incentives. The underlying principle is to ensure that social returns are higher with these incentives than without them. There could be various market failures and distortions that prevent the optimal formation of investment, but unless the government deals with these directly, indirect intervention may be necessary to correct these market failures and distortions.

However, as already discussed, if these labor regulation distortions are significantly binding, implementing the investment incentive system can lead to unintended consequences. To illustrate our concern, consider your local *panaderia* where you buy your *pandesal*. To produce 1,000 kilograms of *pandesal*, the bakery requires a number of hours of labor with a limited number of ovens. Different combinations of ovens and employees can produce the 1,000 kilograms of bread where some combinations use more labor relative to number of ovens, while other combinations use more ovens than labor. The cost of producing 1,000 kilograms of *pandesal* depends on which combinations the bakery uses, considering the market wage rate and the cost of capital.

On this score, a government intervention that effectively reduces the price of capital inputs will bring about two main effects. First, for the same level of output, the firm will use more capital and less labor because it would be cheaper to do so. The increased utilization of capital is referred to in economics as the *substitution or price effect*. Along with this increase in the use of capital resulting from the reduction in the price of capital inputs is a greater or lower use of labor, depending on whether these labor and capital are complements or substitutes. Referred to as the cross-price effects, the impact of the lowered cost of capital on labor depends fundamentally on the chosen technology of firms. Second, the reduction in the price of capital inputs makes the production of additional units of output more profitable and, therefore, provides an incentive for the firm to expand its level of output. This expansion means increased demand for labor inputs (output effect).

In summary, the use of capital-cheapening fiscal incentives to stimulate industry output can have an adverse impact on employment expansion. Whether in fact the net effect of capital cheapening dampens or stimulates labor use cannot be resolved theoretically, but is in fact an empirical question that is explored below.

To show this, we use a panel data<sup>5</sup> of 398 firms that were registered with the BOI from 1995 to 2008. These firms consist mainly of new entrants classified as an MSME.

To measure the effects of fiscal incentives, we perform a fixed effects regression of capital expenditures, number of workers, and the capital labor ratio on the fiscal incentives in the form of taxes actually reduced as a result of the fiscal incentives.<sup>6</sup> Time-invariant factors are controlled through this methodology. In order to control time-varying firm factors, instrumental variables, such as income and value of production as well as the value of plant and buildings, are included in the analysis. All of these factors are measured in real terms in order to control for inflation. Finally, the impact of labor market regulations is assessed by incorporating two variables: the minimum wage and the interaction between incentives and minimum wages. The first factor determines the effect of minimum wages on capital, labor, and the capital-labor ratio. The second or interaction factor defines the indirect effect of labor market regulations as this considers how firms will behave due to incentives in the face of minimum wages.

To determine the impact of minimum wage, estimates are first made with only the minimum wage to measure their direct effect on capital, labor, and the ratio of capital and labor. And then in the second specification, we incorporate the interaction between the variables. Comparing the results of the two estimates will allow us to assess the importance of the indirect effect of minimum wages on the incentives. The whole idea is that biased conclusions can be made unless these interactions are taken into account.

The results of the empirical test are shown in Table 3, focusing on the elasticities of capital expenditures, number of workers, and capital labor ratio on the three key

---

<sup>5</sup> Panel data have several advantages. First, these are more informative, resulting in greater variability, less collinearity, and more degrees of freedom. The estimates are more efficient given more data points. Second, the data can be used to control for firm heterogeneity or the unobservable characteristics of the firm. Third, the data can be used to account for unobserved factors across time, industries, and products, including other constraints for attracting investments. Fourth, the data allow us to examine dynamic changes. There are, however, two main disadvantages in the use of panel data. First, there may be some attrition bias since firms may systematically drop out of the sample over time. Once the firm is no longer registered with the BOI or has used up the life of its incentives, then the firm will be excluded from the sample. This means that the conclusion in this paper only applies to companies that are registered with the BOI. Second, there may be sample selection bias since only the firms that registered with the BOI will be included in the data. This means that the results of the analysis will be restricted only to those firms that have registered and not to all firms in the country.

<sup>6</sup> For the estimates on capital expenditures, a linear model is used while for the number of workers a double log model is adopted. This explains the differences in degrees of freedom. The choice of the model is based on goodness of fit.



Table 3. Selected estimates of elasticities of capital expenditures, workers, and capital-labor ratio to incentives

	Capital Expenditures		Workers		Capital-Labor Ratio	
	Without Interaction	With Interaction	Without Interaction	With Interaction	Without Interaction	With Interaction
Incentives	0.051**	-0.328**	0.173**	0.617	0.208**	-0.813**
	(3.73)	(2.49)	(6.23)	(0.92)	(5.33)	(2.13)
Minimum wages	0.497	0.088	-0.444	- <sup>a</sup>	-0.210	-1.043
	(0.52)	(0.09)	(0.66)		(0.08)	(0.38)
Incentives* minimum wages		0.382**		-0.444		1.014**
		(2.89)		(0.66)		(2.69)
R-sq	0.279	0.280	0.178	0.176	0.063	0.069
F-test	267.74	216.45	15.58	12.67	22.28	19.34
N	2,995	2,995	841	841	1,883	1,883

Notes: \*\* and \* indicate 1 and 5 percent level of significance. Figures in parentheses are absolute values of asymptotic t-values.

<sup>a</sup> Perfectly correlated with interaction term, hence omitted.

Source: Lanzona (2012)

independent variables—incentives offered, minimum wages, and the interaction of these two factors.<sup>7</sup> For the capital expenditures estimates, note that without the interaction term, the impact of the incentives is to increase significantly the capital expenditures. However, this is affected by omitted variable bias. Once we consider the interaction with minimum wages, the incentives per se significantly affect the capital expenditures, resulting in more labor demand. However, because of the minimum wages, the incentives result in greater capital expenditures. Firms would then substitute capital for labor. In effect, the observed positive impact of these estimates is really due to the reaction of the firms to the minimum wages in combination with the incentives.

For the labor estimates, note that without the interaction, the effect of incentives is to significantly increase labor demand. Unfortunately, this is biased as this effect is due to the positive correlation of output and labor. However, note that when the

<sup>7</sup> The results here are based on the findings of Lanzona (2012).

interaction is included in the regression, the effect becomes insignificant as minimum wages result in lower demand for workers, and incentives are used instead to increase capital expenditures, raising output but not labor significantly.

Finally for the capital-labor ratio estimates, similar results are observed. Without the interaction, incentives raise the ratio but with the interaction, the incentives actually lower the ratio. This suggests that the minimum wages push firms to invest in capital instead of labor as incentives are provided.

These estimates show that financial incentives have indeed raised output, which explains the statistically significant increase in labor use when the interaction term of incentives and minimum wages are omitted. However, with the inclusion of this interaction term, the increases in output seem to have been only generated because of greater use of capital inputs, thereby resulting in insignificant change in labor. Indeed, while capital and labor are observed to be complementary, the labor laws combined with the financial incentives have drawn disproportionately more capital than labor.

It should be emphasized that in analyzing the employment effects of fiscal incentives, it is important to take into account their context, specifically the labor regulatory environment. Compared to its competition, Philippine labor is expensive. Moreover, the ability of its enterprises to hire and fire workers is limited by highly restrictive employment protection legislation (see chapters on contractualization and minimum wage in this volume).

Given the restrictive labor regulations, enterprises look for ways of reducing labor as production inputs, which result in reduced opportunities for the worker or worker flexibility. One of those ways is for firms to adopt production processes that for a given level of output use less labor and more capital. In which case, they may be more likely to take advantage of government incentives and facilitation services that promote the use of capital instead of labor. As a result, employment could fall despite the stimulative “output effect” and complementarities of capital cheapening and labor utilization. Along the same line of thought, the employment reduction effect of increased minimum wages could be larger in absolute terms the greater and easier the firms’ access to cheaper capital inputs.

## Summary and conclusion

The main lesson from this analysis is that regardless of how sound certain policies appear to be conceptually, empirical results would prove them otherwise. Labor market regulations intended to provide worker security, but in reality, it created

conditions that make it difficult for smaller firms to acquire more labor and provide employment. While there are several ways to circumvent regulations, only the larger firms are able to manage these. It is ironic that the Labor Code, instead of providing good quality and secure jobs, forces firms to circumvent the laws either by investing more in capital or hiring part-time workers under subcontractors.

While financial incentives may be used to address the constraints posed in the labor market regulations, such regulations continue to overwhelm the markets. As more incentives become available, the firms continue to avoid the huge costs involved in hiring workers by investing more in capital.

This then leads to an industrial structure that is capital intensive and at the same time concentrated in few firms. Once the incentives become available, smaller firms end up adapting to the system by adopting capital-intensive technologies as well. Missed opportunities in creating better and more jobs are then observed when labor regulations are that inflexible.

In light of these results, it is proposed that apart from giving smaller firms financial incentives, labor markets regulations be relaxed as well, while leaving the current set of regulations on the larger firms. In addition, product market deregulation or policies that protect the large firms should also be pursued.

This policy can result in some form of dualism—as the smaller firms will be operating in a different set of rules, including the market wage which is expected to be lower than the prescribed minimum wage. In this case, the larger firms may end up getting the more productive workers. Hence, it is necessary for the government to support workers of the smaller firms by providing more social protection.

Large firms, however, should either provide worker security on their own or opt to obtain the social security programs provided by the government. If they choose the latter, however, they will have to lower their wages below the prescribed minimum and offer more jobs to less-experienced and less-schooled workers. In the process, the prescribed minimum wage represents a skill premium to those workers who choose to work for firms that comply with the minimum wage.

Over the long term though, the smaller firms can compete for the more productive workers as their operations experience scale economies. In this process, financial incentives are intended to bring about greater returns for society, instead of simply a means of countering labor market regulations.

More precisely, there are various reasons why this policy can be more efficient in creating more jobs. First, without the burden created by labor market regulations, investments can be required, among others, to complement labor requirements and create employment. Second, investment can embody technologies, knowledge,

and know-how, which the MSMEs would not have access to otherwise. These new technologies and skills have the potential to spill over to domestic firms, spurring innovation and furthering technological advancement. Third, investments have the potential in enhancing competition among domestic firms as they compete with multinational corporations not only for resources (e.g., labor, capital, raw materials) but also in the markets for final goods and services. Competitive outcomes therefore become closer to a developing country's reality, resulting in greater worker mobility. Finally, the formation of linkages with upstream and downstream industries will allow the smaller domestic firms to tap foreign markets and achieve productive efficiencies that would have otherwise been impossible had they been confined to their own domestic market.

Clearly, investment incentives can be a useful fiscal policy instrument that can be used to spur growth. It is merely a matter of scrutinizing how the policies are defined, and if your politician and government official promise more jobs, ask them how they will make it happen.

## References

- Acs, Z.J. and D.B. Audretsch. 1987. Innovation, market structure, and firm size. *The Review of Economics and Statistics* 69(4):567–574.
- Aldaba, R. 2000. The state of competition in the Philippine manufacturing industry. PASCN Discussion Paper No. 2000-13. Makati City, Philippines: Philippine Institute for Development Studies.
- . 2003. Concentration and market power in the Philippine manufacturing industry. *Philippine Review of Economics* 40(1):27–57.
- . 2009. SMEs in the Philippine manufacturing industry and globalization: Meeting the development challenges. *Philippine Review of Economics* 46(1):125–188.
- Aldaba, R. and F. Aldaba. 2014. Toward competitive and innovative ASEAN SMEs: Philippine SME Policy Index 2012. PIDS Discussion Paper No. 2014-30. Makati City, Philippines: Philippine Institute for Development Studies.
- Biggs, T., M. Raturi, and P. Srivastava. 2002. Ethnic networks and access to credit: Evidence from the manufacturing sector in Kenya. *Journal of Economic Behavior & Organization* 49(4):473–486.
- Lanzona, L. 2012. Financial investments: A reassessment. Makati City, Philippines: Board of Investments.
- . 2014. The effects of minimum wages on the Philippine economy. PIDS Policy Notes No. 2014-15. Makati City, Philippines: Philippine Institute of Development Studies.
- Pack, H. 1992. Technology gaps between industrial and developing countries: Are there dividends for latecomers? *World Bank Economic Review* 6 (Supplement 1):283–302.

- Pack, H. and L. Westphal. 1986. Industrial strategy and technological change: Theory versus reality. *Journal of Development Economics* 22(1):87–128.
- Patalinghug, E. 1983. Market concentration in Philippine food, home appliance, and textile industries. *Philippine Review of Economics and Business* 20(2):215–233.
- Sicat, G. 1986. A historical and current perspective of Philippine economic problems. PIDS Monograph Series No. 11. Makati City, Philippines: Philippine Institute of Development Studies.
- Squire, L. and S. Suthiwart-Narueput. 1997. The impact of labor market regulations. *The World Bank Economic Review* 11(1):119–143.
- Tecson, G. 2004. Review of existing policies affecting micro, small, and medium enterprises in the Philippines. Makati City, Philippines: Small and Medium Enterprises and Development for Sustainable Employment Program.

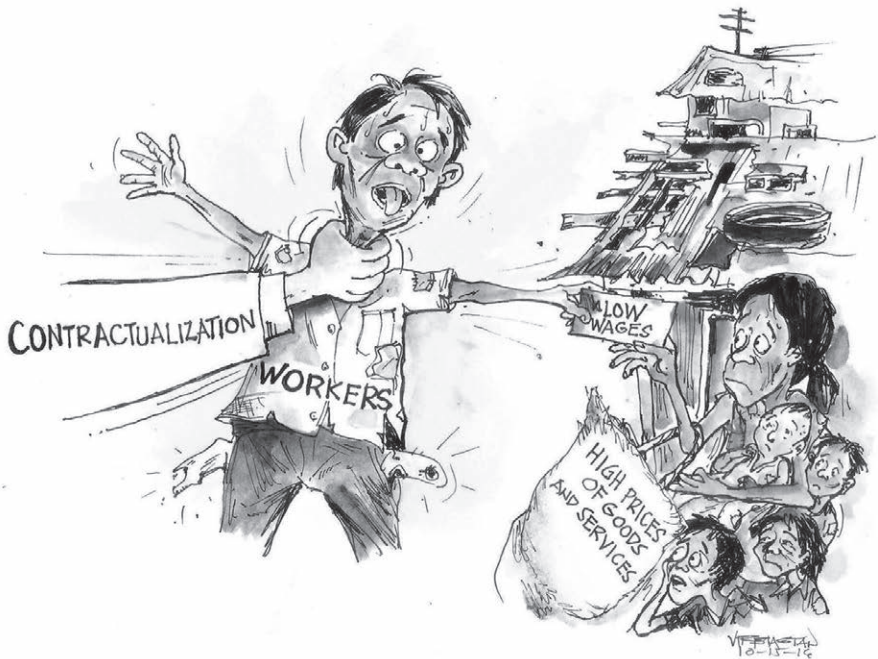
## Chapter 5

# Beware of the “End Contractualization!” Battle Cry

Vicente B. Paqueo and Aniceto C. Orbeta Jr.<sup>1</sup>

### Abstract

In the aftermath of the 2016 election, labor leaders and their political allies pushed for an immediate end to so-called employment “contractualization”, a policy proposal currently popular with voters and politicians. The idea is for the government to tighten and reduce, if not prohibit, the use of temporary employment contracts (TECs) and job outsourcing. This paper analyzes this



policy idea and its potential economic consequences by looking at the roles of TECs and job outsourcing in the functioning of efficient labor markets, the experience of European countries regarding TECs, and Philippine employment data. The study finds that while the policy idea is undoubtedly well intentioned, it can undermine the goal of achieving rapid, inclusive, and sustained economic growth. The realization of this outcome depends on the nature of the policy design to be adopted. On this point, the paper suggests a framework that can be useful in formulating a coherent policy on temporary employment and a strategy for dealing with “endo” practices.

### **The story of three ladies**

*Directly hired by the firm.* When Neri turned 18 years old, she hurriedly applied as a saleslady in a department store in their town. She dropped out of college on her first year, the oldest in her class because she had to skip two years of high school due to poverty. Meeting the requirements and passing the interview, Neri got the job—her first job at that. Her contract indicates that she would be on probation for six months pending evaluation for possible regularization. She thought that this was good enough knowing some of her peers were not able to get directly hired by the department store and even had to apply through different agencies. Neri and her family felt hopeful. On the fourth month, however, Neri was informed that she was at the end of her contract or “endo.” It was disheartening news to Neri’s poor family. Even worse, the department store had a policy that a salesperson can only directly apply once. If not offered a regular position, the only option is to apply through an agency. Neri felt bad about this and got frustrated. She did not bother to apply through agencies anymore and went jobless for a time. Four years after, she is now a mother to a one-year-old baby and currently work as a regular employee in an electronics factory. Looking back, Neri knew why she did not get the permanent saleslady position. Being young and somewhat still immature, she had been tardy at work and incurred more than the allowable absences. She now carries the lessons she learned from that experience.

*Hired through a manpower agency.* Nene, unlike Neri, did not have the confidence to directly apply to the department store. She heard that they only considered applicants who have at least reached college. As she was only a high school graduate, she applied through a manpower agency and was chosen to work as a saleslady. Her contract with the agency indicates an initial period of six months pending evaluation for renewal of contract to another six months. The contract also indicated that an agency fee of

PHP 550 will be deducted every 15 days from her salary that would be released by the agency. The job came at a good time as she was in dire need of income to support her old parents. She always came on time and was rarely absent from work. Her performance evaluation came in satisfactory that she was able to renew her contract thrice. Sadly, despite her satisfactory performance and good work ethics, she would never be offered a regular position. As an agency-hired employee, she is bound to her contract with the agency and could only be renewed every six months. Afraid to go jobless, she accepted this condition by the agency. In her mind, her priority was to gain work experience first, no matter how limiting the setup. After all, she was grateful for the help of the agency to get the job despite her poor credentials and lack of experience.

*Hired through an agency then directly hired by the company.* Diding had a rather different experience. She was raised in poverty in the Visayas as the eldest of her four siblings. Her father died when she was in high school. Her family transferred to Manila in their aunt’s house, where her mother served as a maid. When it became clear that she needed to help her mother with her siblings, she applied as a department store saleslady through an agency. It became her first job. Many times she felt like not going to work but had to fight tardiness off. She knew her siblings would go hungry if she lost her job. After two years of repeated renewal of six-month contracts, Diding finally decided to apply directly in a different branch of the department store. Armed with her two-year experience and positive performance evaluation, she got accepted under probation for six months pending evaluation for possible regularization. Consistently, Diding did her best to apply the skills she learned in building customer rapport and making sales. Her good performance did not go unnoticed. She was offered a regular position, but her luck did not stop there. After a couple of years, she got promoted as a department manager in ladies’ wear where she imparted her skills and wisdom to younger salesladies. For a long time, her job at the department store became her family’s bread and butter. With the help of other siblings, they were able to send their youngest sibling to college. Now married and with her own child, Diding currently works as one of the coordinators of the Social Security System (SSS) office of the Philippine Embassy in Dubai. A career she never dreamed of attaining, which only started with a six-month temporary employment contract.

The above stories depict the familiar experience of many Filipino workers who used temporary employment as a stepping stone for better job opportunities. With the current clamor to end contractualization and the call to outlaw temporary employment contracts (TECs), will there still be stories like Neri, Nene, and Diding in the future?



## Understanding the clamor

“End contractualization!” is the ever-present battle cry of worker groups in the Philippines. For them, this means that decades-old “endo” practices should be made illegal (“endo” is short for end of contract). These practices refer to the use of TECs allowing a firm to hire temporary workers for a six-month probation, dismiss TEC workers after a few (usually five) months, then rehire them and dismiss them again after five months, colloquially known as 5-5-5. In 2016, anticontractualization advocates have succeeded in getting political leaders, including the elected president and vice-president, to commit to a new law and immediate issuance of regulations that would tighten, if not abolish, the use of TECs and tamp down abuses in outsourcing. Following up on his electoral promise, President Duterte has given his new Department of Labor and Employment (DOLE) secretary marching orders to end “contractualization”. The president emphasizes that the government, after all, is mandated by the Constitution to provide job security to all workers.

Defining “end contractualization” and to what extent the use of TECs will be curtailed vary across different actors in the political-economic spectrum. What specific TEC and outsourcing practices will be outlawed remain unclear. Despite this lack of clarity, the common rhetoric against TECs has been burning and sweeping. Except for the recent World Bank Philippine labor market review,<sup>1</sup> and commentaries by renowned Filipino economists,<sup>2</sup> there has been little awareness and economic discussions on the potential risks of the above policy proposals. To inform the labor policy reform debate, we examine empirical evidences for and against TECs, articulating potential consequences for inclusive economic growth, especially to the stakeholder the proposal is supposed to protect: the Filipino workers. Like the impact of rapidly rising legal minimum wages (see Paqueo et al., Chapter 3 of this volume), some proposed regulatory changes could inadvertently hurt the growth and survival<sup>3</sup> of small enterprises (see Lanzona and Paqueo, Chapter 4 of this volume). This could prevent them from providing job opportunities to people with poor credentials. Such unintentional consequences could happen, should political leaders fail to recognize TECs’ role in the efficient functioning of labor markets. Specifically, we look at Europe’s efforts to address “eurosclerosis”—an economic illness where a country

---

<sup>1</sup> World Bank (2016).

<sup>2</sup> Gerardo Sicat (first National Economic Planning Secretary), Dr. John Nye (Frederic Bastiat Professor of Political Economy in George Mason University), and Dr. Vicente Paqueo (retired World Bank economist and expert in economics and human development) lay out the negative effects of constrictive labor policies.

<sup>3</sup> Data indicate that the survival probability of small enterprises is less than 50 percent.

persistently experience high unemployment during periods of economic growth.<sup>4</sup> We also look at the buffer stock, filter, and outsourcing efficiency hypotheses to explain TECs’ role in employment and unemployment.

While we do not pretend to present definitive conclusions about the “anticontractualization” proposals, we believe that a more informed view of the policy proposal is needed. This is to allow time to find more efficient and less counterproductive alternatives to the proposed curtailment of TEC use. Based on our preliminary reading of immediately available information, we present a cautionary note.

## The economic context

The Philippines, now one of Asia’s brightest investment spots, has finally learned to grow its gross domestic product (GDP) with diversified income sources from remarkable business process outsourcing growth and overseas Filipino workers’ remittances. Such accomplishments are founded on sound macroeconomic policies, efficiency-enhancing trade and institutional reforms, and the rise of national productivity (WB 2014 and 2016). However, the country’s poverty rate (Figure 1) remains stubbornly high with high income inequality. Moreover, inclusive growth remains a dream due to lack of decent jobs where there is high open unemployment rate among the youth (15.30% among 21–29 year olds). **This poses a challenge for the government to create an enabling environment for the youth to find the right job match before it evolves into costly social problems of political unrest, even criminality and drugs.** We argue that TEC curtailment with aggressive push for higher minimum wages and costly worker dismissals could hurt young workers.

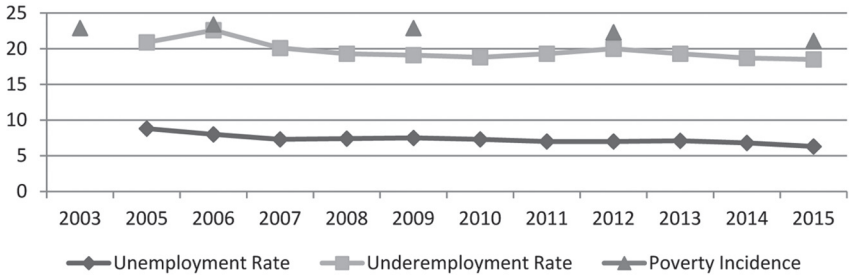
## Profile of Filipino workers and the nature of their jobs

It is clear from the data in Table 1 that Filipino workers are predominantly regular workers constituting 70 percent of all workers. Interestingly, the share of regular employees was steady at 75 percent prior to 2014. In terms of wage rate presented in Table 2, we find that: 1) relatively, regular workers have higher wages; 2) there is a decline in real wage rate between 2001 and 2014; and 3) there is a rise in real

---

<sup>4</sup> “Eurosclerosis” is “a term introduced by German economist Herbert Giersch referring to economic stagnation that can result from a government’s overregulation and overly generous social benefits policies” (Investopedia.com).

Figure 1. The persistence of high poverty, unemployment, and underemployment rates, 2003–2015 (in %)



Source: Labor Force Survey (LFS), Philippine Statistics Authority (PSA), 2014

Table 1. Distribution of employment by nature of job: Rising share of temporary workers

Nature of Job	2000	2005	2010	2014
Temporary	18.4	20.8	21.9	24.0
Regular	74.5	74.8	74.2	69.6
Others	7.1	4.4	3.9	6.4

Source: LFS (PSA 2014). Consumer price index (CPI) deflator is used.

earnings from PHP 260 (2010) to PHP 266 (2014) during the term of President Benigno Aquino III.

## Regularization, endo, and related laws

### The political context

Why is there a strong political demand to end contractualization and outlaw all forms of TECs? There is a popular perception that firms profited from rapid economic growth, but workers do not share benefits and are left behind. By ending contractualization, advocates believe that the laborer’s economic situation would improve. **TECs are portrayed as a cause of workers’ hardships and exploitation.**

Last election, all presidential candidates committed to end contractualization. President Duterte is now under pressure to deliver on his commitment. There is no

Table 2. Average daily earnings of wage and salary workers (in 2006 prices)  
*Recent rise after decline but still below 2001 level*

Nature of Job	2001	2005	2010	2014
All	PHP 290.3	PHP 268.6	PHP 259.7	PHP 265.6
Regular employees	PHP 329.4	PHP 298.6	PHP 289.9	PHP 300.8
Temporary employees	PHP 201.48	PHP 188.63	PHP 181.56	PHP 194.91

Source: LFS (PSA 2014). CPI deflator is used.

doubt that “endo” practices violate the law. The anticontractualization rhetoric, however, goes beyond the condemnation of those practices.

### **Labor regulatory environment.**

The Labor Code of the Philippines (LCP), enacted in 1974, follows constitutional mandate to protect the poor against unfair labor practices, strengthen their bargaining power, and promote their standard of living. Table 3 defines TECs relative to LCP’s classification of employees.

There are two fundamental reasons why workers want to be regular employees. First, regular workers are entitled to certain benefits that temporary employees are not. Second, regular workers can be dismissed only for lawful or authorized cause and with observance of due process. This means, in practice, it is very difficult and costly for firms to dismiss regular workers (security of tenure).

As part of Philippine employment protection laws (EPLs), employers must offer permanent employment to casuals and other temps after six months of engagement. Otherwise, the employers must lay them off (LCP Articles 279, 280, 281, 286 and 287).<sup>5</sup> This is the so-called regularization law or rule. Some employers resort to endo to avoid adverse consequences on their business. Temporary workers can be legally hired directly by principals or through manpower service contractors (agencies) provided certain conditions are met.<sup>6</sup> Whether through direct hiring or contractors, the endo system is abused by repeatedly hiring the same worker without regularizing them. Labor leaders oppose this, citing they violate rights to secure decent jobs. Firms take advantage of this because it allows them to have an edge in business competition. Such

<sup>5</sup> See detailed discussion of LCP provisions in Chapter 3 of this volume on legal minimum wage.

<sup>6</sup> Prohibition of principal employers from contracting out includes: (1) activities directly related to the employer’s principal business (Article 106, para. 4, LCP); (2) regular functions that are usually necessary or desirable in usual business or trade of the employer (Article 286, para. 1, LCP); and (3) jobs to “labor-only” contractors (Article 106, LCP, in relation to DO 18-A, S 2011).

Table 3. Definition of TECs relative to LCP's classification of employees

<p><b>Regular employees</b> – those performing necessary or desirable activities in the usual trade or business of the employers excluding project or seasonal employees. Plus,</p> <ol style="list-style-type: none"> <li>casual employees who have rendered at least one year of service,</li> <li>employees who are allowed to work after a probationary period, and</li> <li>any probationary employee uninformed about the qualification standards for regular employment at the time of engagement.</li> </ol>	<p><b>TECs = casual plus probationary employees</b></p> <ol style="list-style-type: none"> <li><i>Probationary employees</i> – those working with employers under a             <ol style="list-style-type: none"> <li>written apprenticeship agreements with specified employment duration and</li> <li>specified standards under which he will qualify as a regular employee and specified standards about which the workers have been informed at the time of his engagement.</li> </ol> </li> <li><i>Casuals</i> – total employees less probationary and regular employees</li> </ol>
--	---

TEC = temporary employment contract; LCP = Labor Code of the Philippines

Source: Authors' compilation

circumventions of labor regulations can be interpreted as firms' coping mechanisms for avoiding the cost of regulatory compliance and the risk of getting locked in an unprofitable situation when the business environment changes.

### Philippine labor market (in)efficiency

In order to appreciate the potential consequences of imposing further restrictions on TECs, it is important to know the labor market context and its significance. Table 4 shows that the country's overall labor market efficiency (LME) score is 4.0 on a scale of 1–7; 1 being heavily impeded and 7 being extremely flexible. In contrast, Singapore's LME score is 5.7. Except for Indonesia, other Association of Southeast Asian Nations labor markets also appear to be more efficient than the Philippines. Out of 144 countries, the Philippines ranks 91 on this LME scale. The Philippines also has relatively low scores in (1) hiring and firing (3.4 on a scale of 1–7), (2) redundancy costs (weeks of salary), and (3) flexibility in wage determination (4.8 on a scale of 1–7). The Philippines appears costly relative to labor average productivity: 0.69 compared to Singapore's 0.23, Malaysia's 0.37, and China's 0.33.

These data show that the Philippines, compared to other countries, suffers from a competitive disadvantage when it comes to cost and flexibility of labor use. The current labor market is characterized by inefficiency due to costly and inflexible regulatory environment. This is unfavorable to economic efficiency, competitiveness, and jobs-generating growth. Moreover, it arguably generates unintended consequences against disadvantaged and vulnerable workers and families. Our concern is that anticontractualization policy could exacerbate the above adverse effects, depending

Table 4. Philippine labor market: High labor cost, inflexible, inefficient due to restrictive laws

Country	Labor Market Efficiency Score <sup>a</sup>	Rank in Labor Market Efficiency (out of 144)	Selected Components (1–7)			Ratio of Min. Wage to Ave. Value-Added per Worker <sup>b</sup>
			Hiring and Firing Practices	Redundancy Costs, Weeks of Salary	Flexibility in Wage Determination	
Singapore	5.7	2	5.4	3.0	6.0	
Malaysia	4.8	19	4.9	23.9	5.5	0.23
China	4.6	37	4.6	27.4	4.8	0.33
Viet Nam	4.4	49	3.9	24.6	5.1	0.60
Thailand	4.2	66	4.4	36.0	4.3	0.41
<b>Philippines</b>	<b>4.0</b>	<b>91</b>	<b>3.4</b>	<b>27.4</b>	<b>4.8</b>	<b>0.69</b>
Indonesia	3.8	110	4.3	57.8	4.4	0.55

<sup>a</sup> Score of 1 means heavily impeded by regulations, 7 means extremely flexible.

<sup>b</sup> means no minimum wage.

Source: World Bank (2016). Data from World Economic Forum (2014) and World Bank (2014)

on the kind of interventions adopted. Therefore, awareness of this context is important for an informed public discussion of the anticontractualization issue.

## Toward a more informed response to the anticontractualization advocacy

The call to outlaw TECs is partly due to lack of appreciation of its important role in LME. For government and voters to have a more informed response to the anticontractualization demands, it is critical to have a good understanding of the economic value of TECs. In terms of evidence, we look at the experience of European countries with TEC liberalization given their years of experience with restrictive temporary employment regulations.<sup>7</sup> Further, we highlight three hypotheses on

<sup>7</sup> A caveat: One should be careful about unqualified application of developed countries' labor standards and experience to a developing country like the Philippines. In this case, however, Europe's adoption and then liberalization of highly restrictive regulation of TECs arguably provide a cautionary tale for the Philippines. Many of the labor standards governing TECs in the country mimic those of European and other developed countries. A labor surplus economy that continues to struggle with slow job creation despite rapid GDP growth, the Philippines is more likely to be adversely affected in terms of employment by imposition of more TEC restrictions—or favorably by their liberalization.

the roles of TECs in explaining observed employment and unemployment behavior: buffer stock, screening/filter, and outsourcing efficiency hypotheses.

### **Hypotheses on the roles of TECs**

TECs are mechanisms for efficiently and opportunely allocating labor resources to jobs where and when the economic value of their contributions are highest. This view can be gleaned from the various roles that TECs play in labor market functioning. A well-known role is the employers' use of TECs as "buffer stock". There are many angles to this hypothesis. First, TECs allow firms to make timely adaptation of the level and composition of their workforce to changing demands due to business cycles and unexpected shocks. Second, employers can use TECs to efficiently meet seasonal labor requirements. Third, TECs provide a mechanism allowing enterprises like construction firms to hire temps for project-based employment.

Through TECs, firms avoid unnecessary expenses in between projects, seasons, and economic cycles. In terms of real economy effects, TECs allow employers to avoid maintaining underutilized or unproductive employees during low-demand periods; and they facilitate rapid increase in available workers during peak demand (e.g., harvest season, Christmas season). TECs also allow timely reallocation of labor from low-productivity sectors during low-demand periods to other sectors with higher productivity.

To complement the buffer hypothesis, Faccini (2014) proposes the screening/filter hypothesis to explain how liberalization tends to simultaneously reduce unemployment rate and raise the transition rate of workers from temporary to permanent employment over time. According to Faccini, TECs can be viewed as devices for ensuring quality worker-job matches. He observes that unreliability of information provided by credentials and tests poses a risk to employers. He notes the risk of mismatches can be high and getting stuck with mismatched workers can be costly, depending on the complexity and difficulty of the jobs involved. TECs provide a stepping stone or pathway for workers with poor credentials becoming regular employees, which is good for inclusivity.

There are several implications we can draw from Faccini's analytical framework. First, TECs allow timely reallocation of labor to best fit the available human resource that will minimize costly lock-in effects. Second, curtailment of TECs could lead to reduced employment rate and increased unemployment rate. Third, more restricted use of TECs would decrease the transition rate of workers from temporary to permanent jobs. Moreover, from Faccini's hypothesis, we can infer that curtailment of TECs could lead to less opportunity for disadvantaged or vulnerable workers to

become permanent employees. Therefore, it can be argued that TEC curtailment makes labor market not only inefficient but also less inclusive.

### **“Eurosclerosis” and reform of TECs in Europe**

In the late 1970s and mid-1980s, Europe was suffering from so-called “eurosclerosis”—a term originally coined to describe European countries “experiencing high rates of unemployment and lagging job creation during periods of economic growth”.<sup>8</sup> The culprits were overly generous labor benefits (e.g., unemployment insurance) and overregulation of labor markets (e.g., restrictive rules governing employment contracts). It was believed that the surge and persistence of high unemployment rates after the mid-1970s in Europe was due to labor market rigidities. By 1997, most of Europe had relaxed TEC regulations. As a result, the share of temporary workers in Europe rose from less than 6 percent in 1983 to nearly 15 percent in 2007 (Faccini 2014). To date, liberalization of TECs is seen as a major instrument for bringing down high unemployment rates. Using panel data on 18 European countries from 1985 to 2008, Faccini reports a significantly negative relationship between long-term unemployment rate and EPL indices. He estimated this relationship using multiple fixed effects regression analysis (see Appendix 1).

## **The experience of temps in the Philippines**

### **Workers’ own assessment**

A 2014 survey data<sup>9</sup> (Table 5) suggest that 95 percent of workers employed by “endo” contractors appear satisfied with their current jobs. Additional information reveals that the workers covered by SSS, Pag-IBIG, and PhilHealth are quite high at 95.7, 92.8, and 94.8 percent, respectively. A high proportion also enjoy minimum wages, overtime pay or holiday premiums, and 13th month pay.<sup>10</sup> It is, therefore, not surprising that a high proportion of interviewed workers expressed satisfaction with their current

<sup>8</sup> See footnote 4.

<sup>9</sup> Villena (2014) surveyed a total of 112 respondents composed of 11 contracting agencies, 3 principals, and 98 agency-hired workers. Simple random sampling was used to draw samples from a list of contracting agencies registered under Department Order 18-A in National Capital Region (NCR), Regions IV-A, X, and XI. For the agency-hired workers and principals, snowball sampling was used. In terms of distribution, 53 respondents were from Region XI, 33 from Region X, 15 from Region IV-A, and 6 from NCR. No principal/firm was surveyed from NCR.

<sup>10</sup> Recent accounts from present and former saleslady personnel of a known department store confirm that they receive SSS, Pag-IBIG, and PhilHealth benefits aside from access to medical benefits.



Table 5. Survey of 5-5-5 workers, contractors, and principals in Regions XI, X, IV-A and NCR

Survey Questions	Observations	Percent
How satisfied are you with your current job?		
Satisfied	90	94.7
Dissatisfied	3	2.1
Neither	2	3.2
Total (valid sample)	95	100
Are the following social security and welfare benefits deducted from your monthly salary?		
SSS	94	95.9
Pag-IBIG	91	92.8
PhilHealth	93	94.8
Note: These benefits are paid for by contractor/ agency (92.9%) and principal/company (7.1%)		
Are you entitled to the following rights and privileges?		
Minimum wage	93	94.8
Overtime pay/holiday premiums	86	87.7
13th month pay	95	96.9
Leave credits	27	36.7
Separation pay	36	36.7
Retirement benefits	12	12.2
Security of tenure	9	9.1
Self-organization, collective bargaining	3	3
Safe and healthful working environment	38	38.7

Source: Villena (2014)

jobs despite the fact that only a small proportion of them are entitled to leave credits, separation pay, security of tenure, and other benefits. There is, however, still room for improving the work conditions of endo workers when it comes to security of tenure. As a caveat on this survey, we note the need to validate those conclusions with nationally representative data.

We also find, using the Philippine Labor Force Survey (LFS) data, that the transition rate of workers from temporary to permanent employment is substantial.

In the Philippines, 40–55 percent of temporary workers during the 2003–2010 period transitioned to permanent employment status after a few quarters (Panel LFS data). To compare, temps in Europe (year 1996) who were transitioning to permanent jobs one year later ranges from 56.1 percent in the United Kingdom to 20.8 percent in France. It appears that the Philippine transition rate is at the higher end of the European experience.

Based on the LFS data, more than 50 percent of first-time temps do not make it to regular job and had to be fired after two quarters or six months of work as temps. Workers who fail to transition to regular job after temp work come from disadvantaged groups with poor credentials. This includes the young, the women workers without high school diploma, and others. It takes between four and eight quarters for 50 percent of temps to become permanent (Figure 2). College graduates (Figure 3b), male, and service sector workers (Figures 3a and 3c) have faster rates of transition. Interestingly, when education and other factors are controlled, urban-rural residence does matter significantly (Figure 3d). The implication of differences in temps’ ability to transition to regular jobs is that the six-month period appears too short for workers with poor credentials to learn on the job and for a firm to see their hidden character and competencies. Data suggest that **the current regularization rule is an inflexible one-size-fits-all rule**. The current rule makes it more difficult and costly for disadvantaged workers to be regulars. These findings suggest that allowing more flexibility in the regularization rule could be more inclusive and efficient—more welfare enhancing.<sup>11</sup>

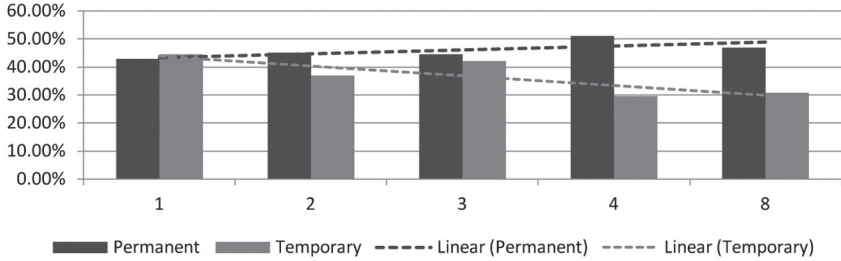
## Understanding endo and the challenge of ending it

Why do some employers resort to endo? This is a strategically important question for the analysis of government’s policy and strategy for ending endo. In our view, endo is a mechanism for coping with the business costs and difficulties associated with labor regulations. For many employers, their decision to regularize a worker or practice endo depends on their calculation of the costs and benefits from endo practices.

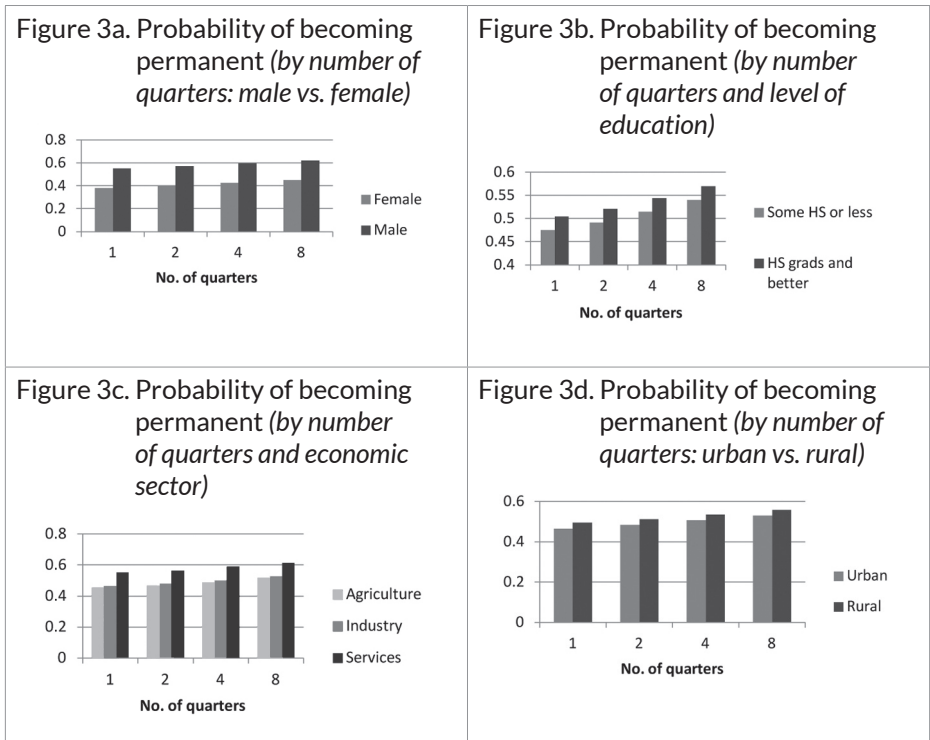
---

<sup>11</sup> Some have pointed out the six-month regularization law is in line with Organisation for Economic Cooperation and Development (OECD) norms. This is irrelevant to the point we are making in this paragraph. The OECD data refer to the average worker and not to laborers with poor credentials and background. But even if we compare averages, one can argue that the average Filipino worker might need more time to learn on the job and show his competencies because his level and quality of education and training are less than his OECD counterpart.

Figure 2. Percent of temps becoming regulars after a given number of quarters working as temps



Source: Panel Labor Force Survey (LFS) data



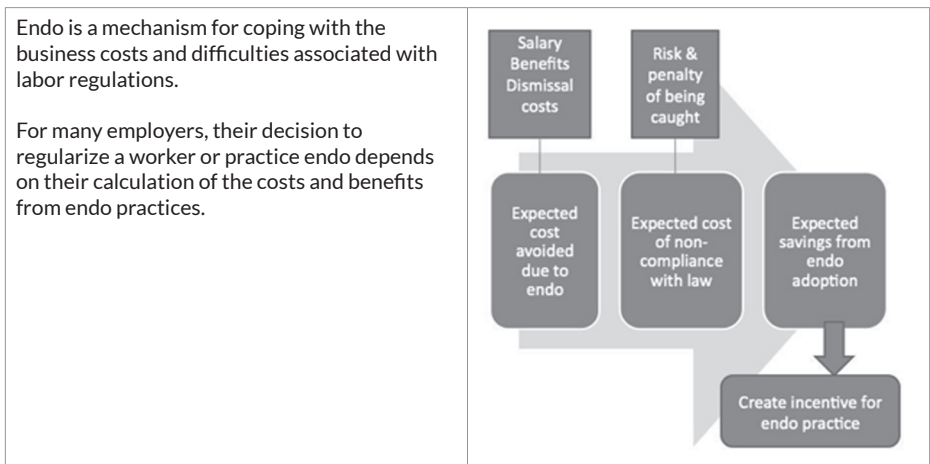
Source: Authors' calculation using probit regression model estimated, based on Panel LFS

Figure 4 presents a simplified model depicting this view in broad terms. The model assumes that an employer would tend to practice endo if by doing so he would enjoy net savings for his enterprise. Net savings here is defined as the additional costs avoided for not regularizing a worker (gross benefit) less the expected cost of getting penalized for not complying with the law (penalty cost). Our hypothesis is that the larger the net savings the higher the probability that an employer would practice endo.

Examples of factors that drive gross benefit include the cost to the firm for contributions to social security, Pag-IBIG, and PhilHealth; overtime pay and other entitlements; and several payment and costs associated with the regular workers’ right to security of tenure. On the other hand, the expected penalty cost would be determined, among others, by the probability of getting caught for noncompliance, the value of the penalties imposed, as well as the reputational cost to the enterprise.

So, other things being equal, we expect endo practice to be more prevalent when minimum wages are higher, since cost of social security, PhilHealth, Pag-IBIG, and other entitlements rise with level of workers’ salary. We also expect that the prevalence of endo would fall with reductions in the cost of dismissal of permanent workers, risk of litigation, and cost of dispute resolution. We further predict that endo would be less prevalent when the penalty cost of noncompliance increases with more frequent and stricter DOLE inspections, larger fines, and bigger back pay awards.

Figure 4. Why do some employers resort to endo practices?



Source: Authors

In theory, there are a variety of ways for reducing the prevalence of endo practice. They range from tightening enforcement of existing labor regulations to passing legislation for plugging loopholes that employers are allegedly abusing to circumvent the regularization law.

The dilemma is that, on the one hand, limiting government action to tightening enforcement might not be enough to eliminate endo practice, as promised by President Duterte. On the other hand, aggressive threats of government harassment, huge penalties, business closures, as well as prohibition of all forms of TECs to close “loopholes” could lead to unintended adverse consequences like reduction in job opportunities and inclusive growth. We propose here a policy analysis framework to control endo practices and their impact on economic outcomes (Figure 5).

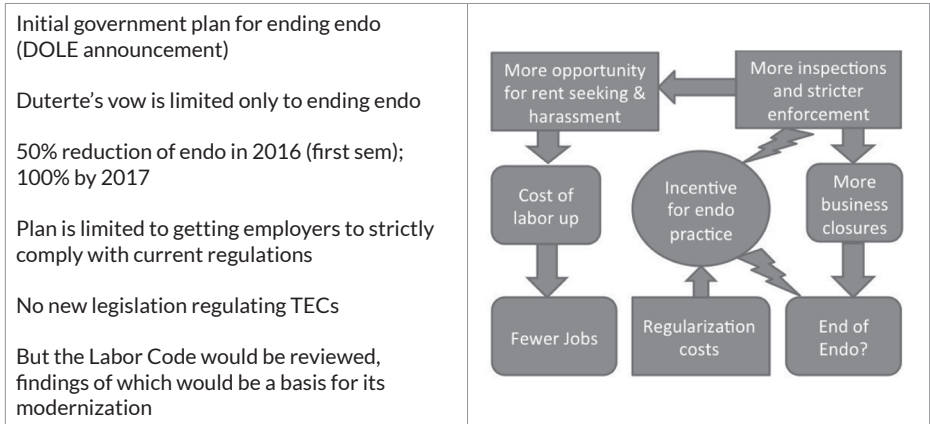
In view of this concern, the Department of Trade and Industry (DTI) has proposed an alternative strategy labeled as a win-win approach to ending endo (Table 6). The proposal is supposed to be a win-win for both employers and workers. All wage and salary workers would have regular jobs and would enjoy all the benefits of a permanent employee. Employers (principals) could hire workers directly as regular employees. Manpower service agencies could also hire workers as regulars and then supply them to principals on a temporary basis. The fly in the ointment is that the additional cost of such a scheme to the employers could be high. One employer’s estimate puts the increase in firms’ costs in the range of 30–40 percent, which is much larger than DTI’s estimate of less than 10 percent. But even with DTI’s lower estimate, the adverse employment impact of DTI’s proposal could still be significant. To counter the impact, the government can rationalize the labor code to reduce the cost, risk, and uncertainty of worker dismissal.

## Conclusions and reflections

To be fair, we round out our conclusion with the following caveat. Some labor leaders have explained that the anticontractualization bills proposed by their unions will not raise the cost of employment. Their reason is that even after regularization of all employees, workers doing seasonal and other time-limited jobs will continue to be paid only for days worked. Therefore, they argue, total prohibition of TECs will not lead to reduction in employment demand and labor market flexibility.

This claim is problematic on several grounds. First, the principle of “no work, no pay” is not explicitly stipulated in the anticontractualization bills currently pending in Congress. Second, under current laws, regular workers are entitled to social

Figure 5. Proposed policy analysis framework for controlling endo practices and their impact on economic outcomes



Source: Authors

Table 6. How else can endo be ended without impeding expansion of employment demand?

DTI’s proposed “win-win solution”	Observations
<p>To allow a firm to hire the services of workers without the obligation of regularizing or firing them after six months of work,</p> <p>Provided they are supplied by qualified manpower service agencies (contractors),</p> <p>Provided further those workers are employed as regular employees of above contractors and said workers receive mandated benefits.</p>	<p>Scheme would give job security to the laborers while addressing the needs of contractors’ principals for employment flexibility.</p> <p>The main issue is the additional costs to be passed on to the principals by manpower suppliers (about 30–40% mark-ups?)</p> <p>This increased labor cost would lower job creation.</p>

Source: Authors

security and other benefits that are partly financed by employer contributions. Third, more importantly, it is far more costly to terminate regular employees than workers under TECs. Unlike temps, regulars can only be terminated for lawful and authorized cause and in accordance with due process.

The application of this restrictive rule to all employees will make termination of regular workers doing seasonal and other time-limited activities highly risky. Employers with deep pockets are especially vulnerable to lawsuits in light of the complexity of numerous overlapping laws and regulations that are prone to stretchable interpretation. The legal risk is further compounded by Philippine jurisprudence, which teaches that, in case of doubt, labor cases should be decided in favor of workers.

With the approval of the bill, employers would face more widespread, expensive lawsuits—exacerbating the risk and uncertainty currently confronting enterprises doing business in the Philippines. Resolving those lawsuits can be a long-drawn, time-consuming, and financially expensive process. The end result is that firms would find it more difficult and costly to adjust and optimize the level and composition of their workforces, particularly with regard to fast-changing, seasonal, irregular, uncertain, and time-limited jobs. As a consequence, some enterprises will be less inclined to invest and employ workers in labor-intensive enterprises while others will find it profitable to develop ways of circumventing the law, including the corruption of government officials. This adverse unintended consequence on good governance is a valuable lesson we can learn from the proliferation of endo practices. A similar lesson is provided by Chapter 8 of this volume. The chapter analyzes and documents how an unrealistic Executive Order 23 on total log ban unleashes lucrative opportunities for rent-seeking (corrupt) behavior without achieving natural forest conservation objectives.

## Appendix

Appendix 1. Higher EPLs raise unemployment rate: Fixed effects model using European panel data and general least squares

Independent Variables	Dependent =	UNEM
$U_{it-1}$	0.872***	(0.033)
EPL temporary contracts <sub>it</sub>	0.436***	(0.129)
EPL regular contracts <sub>it</sub>	0.908*	(0.497)
Union density <sub>it</sub>	0.367	(0.285)
Benefit replacement ratio <sub>it</sub>	0.083	(0.159)
Benefit duration <sub>it</sub>	-0.212*	(0.120)
Centralisation <sub>it</sub>	0.362**	(0.163)
Co-ordination <sub>it</sub>	-0.116	(0.219)
Labour demand shocks <sub>it</sub>	-0.385***	(0.078)
TFP shocks <sub>it</sub>	-0.069*	(0.040)
Time dummies, country dummies		
Hausman test	.001	S.E.

EPL = employment protection law

Notes: \*, \*\*, and \*\*\* denote statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively.

Source: Faccini (2014)



## References

- Department Order 18-A. 2011. Rules implementing Articles 106 to 109 of the Labor Code, as amended. Manila, Philippines: Department of Labor and Employment.
- Faccini, R. 2014. Reassessing labor market reforms: Temporary contracts as a screening device. *The Economic Journal* 124(575):167–200.
- Investopedia. (n.d.). Eurosclerosis. Investopedia, LLC. <http://www.investopedia.com/terms/e/eurosclerosis.asp> (accessed on July 12, 2016).
- Labor Code of the Philippines. 1974. Manila, Philippines: Official Gazette of the Philippines.
- Philippine Statistics Authority (PSA). 2014. *Labor Force Survey*, October 2014 series. Quezon City, Philippines: PSA.
- Villena, I. 2014. Examining the 555 arrangement in contractualization: A study on the repeated hiring practices of firms in selected industries. Monograph Series 2014-07. Manila, Philippines: Institute for Labor Studies, Department of Labor and Employment.
- World Bank (WB). 2014. *Doing Business Report 2015: Going beyond efficiency*. Washington, D.C.: WB.
- . 2016. *Republic of the Philippines labor market review: Employment and poverty*. Washington, D.C.: WB.
- World Economic Forum (WEF). 2014. *Global Competitiveness Report 2014–2015*. Geneva, Switzerland: WEF.

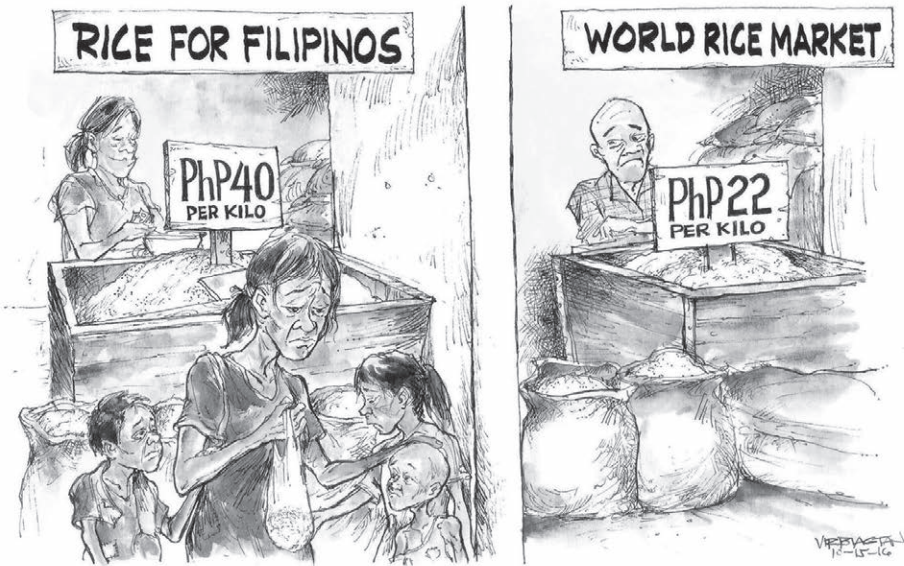
## Chapter 6

# Food (In)security and the Price of Rice Self-Sufficiency

Roehlano M. Briones

### Abstract

The commonly touted solution to achieve food security has always been articulated as achieving self-sufficiency in rice. Since the 1960s, various government regimes have articulated strategies and executed actions to achieve this much-vaunted goal. It has been over half a century, but we have yet to realize this dream. At this point, if we look at the hard facts and the numbers, the picture it paints is not pretty. Achieving rice self-sufficiency comes with a price and let us take a sober look at what it really costs.



## Overview

In the Philippines, food security is strongly associated with self-sufficiency in producing food. The emotional attachment to domestically grown food is especially strong for rice, the main staple and most widely grown crop. The quest for rice self-sufficiency is a venerable tradition: in 1968, former President Ferdinand Marcos boasted in his State of the Nation Address (SONA):<sup>1</sup>

“We have succeeded in solving our chronic food shortage. The country has attained self-sufficiency in rice and corn one year ahead of the deadline set for it by our administration. This fulfills a historic dream of several generations of Filipinos who equated the solution of the rice problem with the nation’s self-esteem.”

This shows that as far back as 1968, the “historic dream” was already “several generations” old! Unfortunately, Marcos’ “solution” did not seem to stick. Five presidencies later, President Benigno Aquino III insisted in his 2011 SONA:

*“Ang gusto nating mangyari: Una, hindi na tayo aangkat ng hindi kailangan. Ikalawa, ayaw na nating umasa sa pag-angkat. Ang isasaing ni Juan Dela Cruz dito ipupunla, dito aanihin, dito bibilhin.”*

That the Philippines is a rice importer is deemed a national embarrassment. It seems ironic to many that the country imports rice, given the advanced state of rice education and research in the country; after all it hosts the International Rice Research Institute, has topnotch agricultural universities, and has trained generations of agricultural scientists in Asia.

I will argue that, contrary to popular belief, being a rice importer is not the real irony. The real irony rather is that **the pursuit of food security had the unintended consequence of raising the price of rice**. Data show that the rice self-sufficiency policy, implemented in the name of food security, pushed up the price of rice to the detriment of the poor. Self-sufficiency policy by itself need not cause the price of rice to increase. It was how the government pursued the goal of rice self-sufficiency that drove up the price. There are better ways of pursuing food security than the flawed policies that have made rice more expensive.

---

<sup>1</sup> <http://www.gov.ph/1968/01/22/ferdinand-e-marcos-third-state-of-the-nation-address-january-22-1968/>

## Background

### Who imports and who exports rice

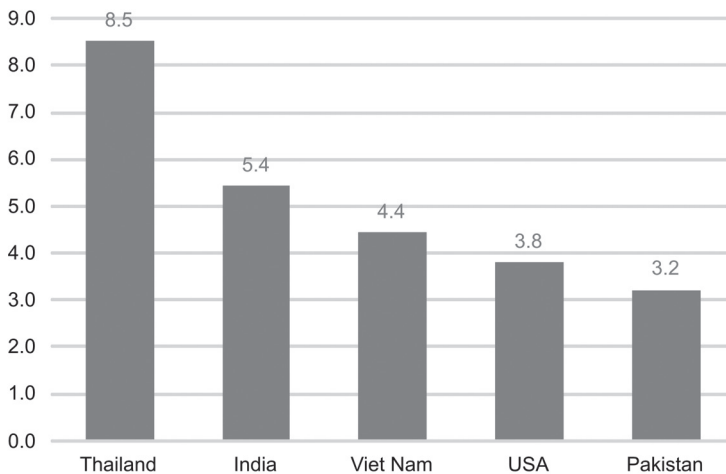
The top five rice exporters worldwide are Thailand, India, Viet Nam, United States (US), and Pakistan (Figure 1), the same dominant countries since 2001. All are in Asia, except the US. Meanwhile from 2001 to 2010, the world's biggest importer was the Philippines, averaging nearly 1.6 million tons annually over the decade (Table 1). On the other hand, for the period 2011–2014, the top three rice importers were: China, Indonesia, and Saudi Arabia; the Philippines completely drops off the list as its imports fall dramatically, averaging just over 800,000 tons per year in that period.

That rice produced in the Philippines is consistently more expensive than the same rice in the world market is evident in Figure 2. That is why the Philippines tends to be a rice importer—in general, a country will import the product in which its cost of domestic production is higher compared with that of other countries.

### Strategies to achieve self-sufficiency

There are two strategies for achieving self-sufficiency in any domestically produced good: one is through support for domestic production; the other is by maintaining

Figure 1. Exports of the top five rice-exporting countries, 2001–2014 ('000,000 tons)



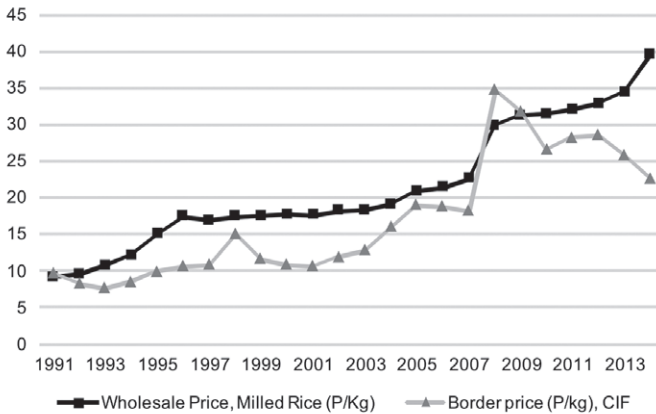
Source: Trademap, International Trade Centre (ITC)

Table 1. Top rice importers, 2001–2015

Rank		2001–2010	Rank		2011–2014
1	Philippines	1,587,589	1	China	1,930,968
2	Nigeria	1,203,190	2	Indonesia	1,469,419
3	United Arab Emirates	1,069,843	3	Saudi Arabia	1,264,296
4	Saudi Arabia	1,010,410	4	Iran	1,237,686
5	Iran	906,606	5	Iraq	1,207,115
6	Iraq	888,495	6	Mozambique	1,151,281
7	Senegal	874,676	7	South Africa	1,073,279
8	Cote d'Ivoire	802,792	8	Senegal	1,020,986
9	Mexico	762,067	9	Cote d'Ivoire	989,545
10	South Africa	755,474	10	Malaysia	967,378

Source: Trademap, ITC

Figure 2. Border and domestic prices, 1991–2014 (PHP/kg)



PHP = Philippine peso; kg = kilogram; CIF = cost, insurance, and freight  
 Sources: Whole sale price - CountrySTAT, Philippine Statistics Authority (2016); Border price - Trademap, ITC

barriers to imports. The latter is called “protectionism”, and rightly so as these barriers shield local producers from foreign competition. The two strategies are often implemented together.

If only the first strategy were pursued, then self-sufficiency will not make the target good more expensive. In fact, it may make it cheaper depending on the type and magnitude of production support. It is the second strategy of protection which is behind high domestic prices. Protectionism prevents cheap imports from coming in. In the extreme case of a complete import ban, only domestic supply will be left to satisfy domestic demand. Initially a ban will lead to shortages; this causes prices to soar, stimulating domestic production and stifling off some of the demand, while stimulating more production. Under an import ban, shortage is eventually eliminated and self-sufficiency attained, but consumers end up paying a high price.

### **Why is the rice outside cheaper than rice inside the Philippines?**

The main reason why world price is consistently lower than domestic price is that cost of production per ton of rice is lower among the main exporting countries (Figure 3). As argued by Dawe (2014), historically, Philippines and Indonesia have been rice-importing countries, while Thailand and Viet Nam (where Philippines imports most of its rice) are historically rice-exporting countries. The reason is not due to government programs nor recent improvements in technology, but rather geography and available resources.<sup>2</sup> Viet Nam and Thailand are blessed with abundant water resources and floodplains, thanks to the presence of vast river basins, i.e., of the Mekong, Chao Phraya, Red Delta, etc. Cost of production on a per kilogram basis must in the long term be lower in these countries compared to Indonesia and Philippines, which are populous archipelagic countries with mostly rolling terrain.

## **How the Philippines stopped importing a lot of rice**

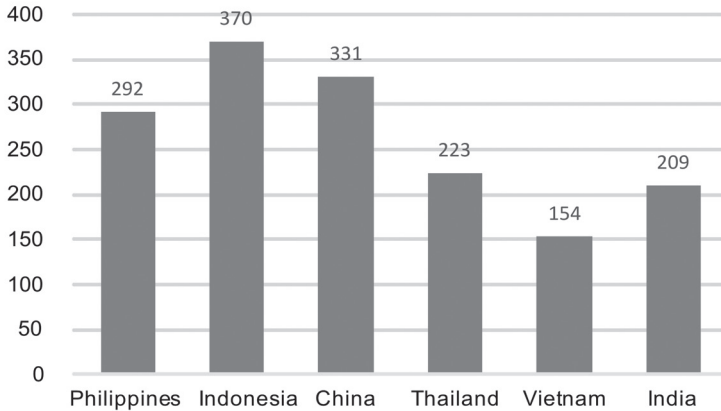
### **Background: How the Philippines imports rice**

In the Philippines, the private sector has the default right to import any agricultural product, subject to compliance with safety standards, licenses, and payment of taxes. This is consistent with the World Trade Organization (WTO) requirement that all trade barriers be converted entirely to tariffs, except what is necessary to safeguard human, plant, and animal health. This requirement is called *tariffication*, for which a law has in fact been passed, namely, the Agricultural Tariffication Act (Republic Act or RA 8178).

---

<sup>2</sup> Dawe (2014)

Figure 3. Cost of production of paddy rice, in USD/ton



USD = United States dollar

Source: Moya (2015)

There is one significant exception: rice. The right to import rice is vested on the National Food Authority (NFA), a government-owned corporation, by virtue of Presidential Decree No. 4. When the Philippines joined the WTO in 1995, it negotiated for and got an exemption or *special treatment* for rice until 2005. Upon expiry in 2005, the Philippines again negotiated for an extension up to 2012. Finally in 2012, it negotiated for and got a waiver to maintain special treatment up to end-June 2017.

The exceptional status of rice is likewise provided in the Agricultural Tariffication Act. One legal problem though is that the exception for rice in the law is not qualified by time, i.e., it is implicitly a permanent exception. This seems to run afoul of the country's treaty obligation to the WTO, in which the special treatment is clearly a temporary exception.

### How the Philippines stopped importing a lot of rice

The Aquino government took very seriously the goal of rice self-sufficiency, emphasized by no less than the president, as seen in the quote in Section 1. The goal was to be achieved under a Food Staples Sufficiency Program (FSSP). The FSSP is heavy on production support for the rice industry (first strategy for self-sufficiency). However, it is silent on trade policy (second strategy for self-sufficiency). There are a couple of clues though on the implications of FSSP for trade policy:

1. Farmers will receive a support price “at levels that will guarantee farmers reasonable returns.”
2. Government intervention will be limited. As much as possible, marketing functions will be allocated to the private sector. Government will intervene only to “mitigate surges in retail prices.”

Hence, government is implicitly targeting a stable farm gate price. The FSSP document identifies **direct procurement from farmers** (up to 9.5% of palay output) as the means to achieve the support price. However, in practice, the policy of stabilizing farm gate price determines import policy. Naturally, if imports are allowed to freely enter, the worry will be a collapse of farm gate price; hence, limits are imposed on the amount of allowable imports. On the other hand, when retail prices are rapidly increasing, government may increase imports in order to “mitigate surges in retail prices”. NFA is therefore playing a balancing act of keeping farm gate prices high during stable periods but preventing spikes in retail prices during unstable periods. Hence, during normal periods, the quantitative restriction is kept very low, relaxing only when retail prices threaten to blow up. The aim of keeping high and stable farm gate prices perfectly explains the sharp cutback in imports in 2011–2015, enforced by the import monopoly and import quota policy of NFA.

### **How did the government’s import policy affect the domestic price of rice?**

The country’s import policy can be summarized as follows: During normal times, when domestic prices are stable, government restricts imports to prevent domestic prices from falling to the level of world prices. However, during abnormal times, when domestic retail prices are increasing (e.g., due to harvest failure or depletion of rice stocks), government resorts to importation to prevent prices from blowing up.

This policy is not unique to FSSP; in general, it highlights the political economy of rice policy since the beginning of the import monopoly of NFA. This has two implications:

1. *Movements in the world price do not systematically influence the domestic price.* Rather, domestic price is determined by domestic supply-demand interaction and is only intermittently affected by world price.
2. *Over time domestic price seldom goes down; when it goes up, it does so in spurts.* This second implication is called a “ratchet effect”. If world price is falling, then the ratchet effect leads to a widening gap between domestic and world price.

To check for the first implication, we run a standard statistical test, the *Johansen cointegration test*. The hypothesis to be tested is as follows: there is **no long-term**



**relationship** between domestic price and world price. Running the test on annual data for domestic and foreign price (1991–2014) finds that the hypothesis cannot be rejected. To buttress reliability of the Johansen cointegration test, consider another market for which we suspect a strong linkage between world and domestic price, namely, coconut oil. The same test on domestic and world price of coconut oil over the same period rejects the hypothesis of no long-term relationship.

To check for the second implication, we examine evidence for a ratchet effect in Figure 4. World price grows highly erratic over time. Over a 22-year period, price has fallen (negative growth rate) as often as it has increased (positive growth rate). When world price falls, on average, the decline is 10 percent. However, the cumulative value of the decline in absolute terms (105%) is smaller than the cumulative value of the increase (234%), which accounts for the overall upward trend in world prices (seen in Figure 2).

Domestic price also grows erratically, but variability is much lower than that of world price.<sup>3</sup> More importantly, **domestic price rarely declines**; that is, the graph of wholesale price growth rarely crosses the horizontal axis. Annual wholesale prices have fallen only twice, in 1997 and in 2001, and only by 3 percent and 0.1 percent, respectively. Moreover, since 1997, there was a long stretch until 2008 when domestic prices averaged a growth of just 2.5 percent annually. After the price spike of 2008–2009, domestic prices again were kept to an average growth of 3 percent from 2010 to 2013, after which prices blew up with a 15-percent increase.

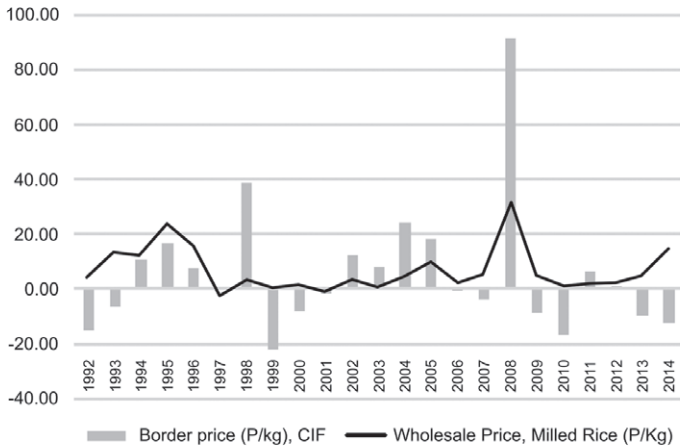
Perhaps this does not affect those in the majority, but for the 26 percent in poverty, any change in the price of rice makes a great impact on their quality of life. Statistical analysis relating regional stunting rates to regional per capita incomes and food prices finds that, as the price of rice increases, the rate of childhood stunting increases. More precisely, a 1-percent increase in the three-year average price of rice causes a 0.6-percent increase in the prevalence of stunting among children under five.

In short, high rice prices cause more malnutrition. In 2013–2015, the rapid increase in the price of rice coincided with the increase in the under-five stunting rate of the nation's children (30.3–33.5%). Such an increase (due in part to the increase in the price of rice) is deeply disturbing given the long-term adverse consequences of early childhood stunting, i.e., poor cognition and educational performance, low adult wages, and low productivity.<sup>4</sup>

<sup>3</sup> Standard deviation of wholesale price is only 8 percent, that of world price is 24 percent.

<sup>4</sup> Data from PhilFSIS (<http://philfsis.psa.gov.ph/index.php/id/14/matrix/F90FSPCU>, accessed July 14, 2016). Long-term effects of stunting is based on Herrin (2016).

Figure 4. Growth rates in domestic and border prices, annual (in %)



CIF = cost, insurance, and freight  
 Source: CountrySTAT, PSA (2015)

### Rice self-sufficiency policy: Hits and misses

The Philippine government did the right thing in pursuing production support programs for rice. In recent years, it shifted support away from ineffective and wasteful fertilizer and seed subsidy programs. There were large budget increases in production support such as irrigation, farm-to-market roads, farm mechanization, postharvest and market facilities, and so on. Of course, we can quibble over the quality of program implementation or whether too much resources went to rice; but these interventions were in the right track in terms of promoting food security by beefing up domestic production capacities.

What the government got wrong, though, is the extension of special treatment in 2012, thereby maintaining the restrictive policies that will only continue to drive up the price of rice. The government should have pursued rice self-sufficiency by judicious support of domestic production rather than by aggressive protection of domestic producers. Instead of extending special treatment in 2012, the government should have implemented tariffication right then.

## Recommendation

The country missed its chance for the removal of special treatment in 2012. The next window of opportunity is 2017, when the waiver that allows continuation of special treatment expires. The executive should file as early as possible the long overdue amendment of RA 8178, which Congress shall hopefully pass promptly. Amendments shall include the following:

1. Repeal of the RA 8178 provision that exempts rice from tariffication.
2. Open importation of rice to the private sector, subject to payment of tariff, and securing import permit for the purpose of complying with health and environmental safety standards.
3. Revisions in the role of the NFA once its import monopoly is removed. One logical option is to split the regulatory function of the agency (ensuring human and environmental safety) from the commercial function (managing a food security stock for rice).
4. Assignment of authority for defining the WTO-compliant policy to the president. The authority covers the equivalent tariff to be imposed, as well as the disposition of revenues to be collected from rice imports.

Once the enabling law is passed, the executive must then define the tariff equivalent to be levied against private rice importers beginning July 2017. A realistic compromise is 35 percent; this is the same rate already given by the Philippines for its neighbors in the Association of Southeast Asian Nations Economic Community. The executive should also decide on the allocation of rice tariff collections: given the negative effect of increased rice importation on local rice farmers, it makes sense to allocate that revenue, in whole or in part, to fund safety nets for rice farmers.<sup>5</sup>

## References

- Briones, R. 2016. Options for supporting rice farmers under a post-QR regime: Review and assessment. PIDS Discussion Paper No. 2015-46. Quezon City, Philippines: Philippine Institute for Development Studies.
- Dawe, D. 2014. Rice self-sufficiency: Nature versus nurture. In *Rice in the shadow of skyscrapers: Policy choices in a dynamic East and Southeast Asian setting*, edited by D. Dawe, S. Jaffee, and N.

---

<sup>5</sup> A social safety net should preferably be given as decoupled production support. See Briones (2016) for a full discussion of safety net for rice farmers.

- Santos. Rome, Italy: Food and Agriculture Organization of the United Nations; Washington, D.C.: World Bank; and Laguna, Philippines: International Rice Research Institute.
- Herrin, A. 2016. Putting prevention of childhood stunting into the forefront of the Nutrition Agenda: A nutrition sector review. PIDS Discussion Paper No. 2016-21. Quezon City, Philippines: Philippine Institute for Development Studies.
- Moya, P.F. 2015. Costs and profitability of rice farming: A cross-country comparison. Presented at the Third Research Seminar on Benchmarking Philippine Economy Relative to Major Rice Producing Countries in Asia, December 3, Makati Shangri La Hotel, Makati City, Philippines.
- Philippine Statistics Authority (PSA). 2015. CountrySTAT. Quezon City, Philippines: PSA.
- . 2016. CountrySTAT. Quezon City, Philippines: PSA.
- State of the Nation Address (SONA). 2011. Manila, Philippines: Official Gazette. <http://www.gov.ph/2011/07/25/benigno-s-aquino-iii-second-state-of-the-nation-address-july-25-2011/>.



## Chapter 7

# Beyond the Rent: Studying the Unintended Consequences of Housing Rent Control Law in Metro Manila

Marife M. Ballesteros and Tatum P. Ramos

### Abstract

There are many populist measures with adverse economic outcomes, but perhaps one of the most alarming comes from implementing housing rent control. Metro Manila occupies a measly 0.2 percent of the country's total land area, but it houses over 10 percent of its population while producing one-third of the gross national product. One thing we do need to remember: for Metro Manila to maintain its productivity, it needs her people. Moving people out of the metropolis will not only hit the economy of our nation's capital, it will also make the lives of the poorest even more miserable either by



"CHEAP RENT! ... BUT MAKE YOUR OWN TOILET AND BATH, KITCHEN, AND BEDROOMS"

raising their cost of living (as they spend more on their daily transportation) or forcing them to seek employment in a job-scarce environment. Regulation of housing rental through policy became the government's response to this problem. What is its impact?

## Introduction

Housing rent control was introduced in the Philippines in the 1970s as a temporary measure to stabilize prices of basic commodities in cases of calamities and macroeconomic instability—particularly the highly inflationary environment of that period. The benefits of rent control can work this way: tenants can save as much money as the difference between the market price of the controlled unit (in the absence of rent control) and actual rent paid. For instance, if the monthly rent for a controlled apartment was PHP 800 and this same unit would have rented PHP 1,000 in the absence of rent control, then the monthly savings is PHP 200. This can also be interpreted as the subsidy (see Appendix 1 for formula) received by the tenant from the government's imposition of rent control.

Literature on housing policy characterizes this as the “first-generation rent control program” (Arnott 2003, p. 91; Jenkins 2009, p. 74), which entailed rent freezes with controlled upward adjustments in rents. This was first introduced in most major cities in Western Europe during World War I to mitigate the disruptive effects of the war and to prevent profiteering. Even at the onset, government regulation on housing rent aims to protect the population by ensuring that affordable housing will be made available for tenants.

Studies evaluating the implementation of the first-generation rent control program have been clear in pointing out the negative effects of the program on the housing market. Rent control is a form of price regulation that caused distortions in the housing market in the form of deterioration of rental housing stock and reduction in supply of affordable rental housing; and higher prices in the uncontrolled sector due to spillover effects and regressive distribution of benefits whereby the gains from lower rents are captured mainly by the higher-income families.

Despite the negative impact, rent control law has become permanent, and, for years, the effectivity of the law has been extended every two or three years. In 2002, rent control was definitively adopted as one of the strategies to make affordable rental housing available to the poor and low-income sector (Appendix 2). The coverage of the law was expanded by raising rent ceiling to PHP 7,500 and further to

PHP 10,000 in 2005. Most countries, including the Philippines, began shifting to the “second-generation” rent control program (also referred to in literature as moderate forms of rent control) in an attempt to address the distortions of first-generation rent controls. Less stringent policies were adopted which included exempting new rental units constructed after the effectivity of the law and allowing landlords to set initial rents between tenancies. Conversion to other uses and undue eviction remain subject to rental regulation.

The economic impact of housing rent control law in the Philippines is little understood. Results from various studies all over the world (Downs 1988; Arnott 1997 and 2003; Turner and Malpezzi 2003; Jenkins 2009) show that, even under the modified rent control regulations, the adverse effects of rent control that were reported under strict rent control regulations still hold true in some cases, and in others, the adverse impact is lessened but not eliminated. In the Philippines, there is no clear evidence pointing out the benefits of this policy, but this is partly due to the difficulty of documenting how the policy is enforced and administered coupled with the lack of rental housing data at the level of detail required for rigorous empirical analysis. Moreover, there is no central administrative body, whether at the local or national government level, to monitor implementation. Data availability has remained a major constraint in doing impact analysis of rent control and other housing policies in the country. Given the growing housing problem in the country, there is a need for government to address data gaps and require regular monitoring of housing information through a national housing and occupancy survey.

Nonetheless, current Philippine housing data still provide insights into the distributional benefits of the policy and the nature of investments in affordable rental housing in the country.

## Does rent control benefit the poor? The case of Metro Manila

Metro Manila, a sprawling urban jungle, houses 13 million people and more are still coming in. The National Capital Region has the highest proportion of renters among the regions. Using the *Annual Poverty Indicators Survey* (APIS), there are over 700,000 renter-families in Metro Manila as of 2014 accounting for 23 percent of total families in the metropolitan city.<sup>1</sup> Of these families, about 98 percent are living in units under

---

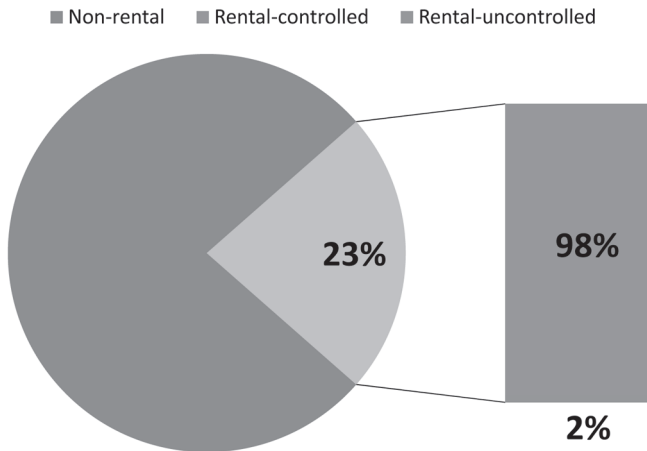
<sup>1</sup> APIS was used since it provides more information about the dwelling characteristic of units occupied by the sample families/households.



rent control coverage while 2 percent of families reside in the uncontrolled sector (Figure 1). Based on the recent provisions of the Philippine rent control law, dwellings with monthly rent of PHP 10,000 and below are covered by rent control while those above PHP 10,000 are not covered by rent control.

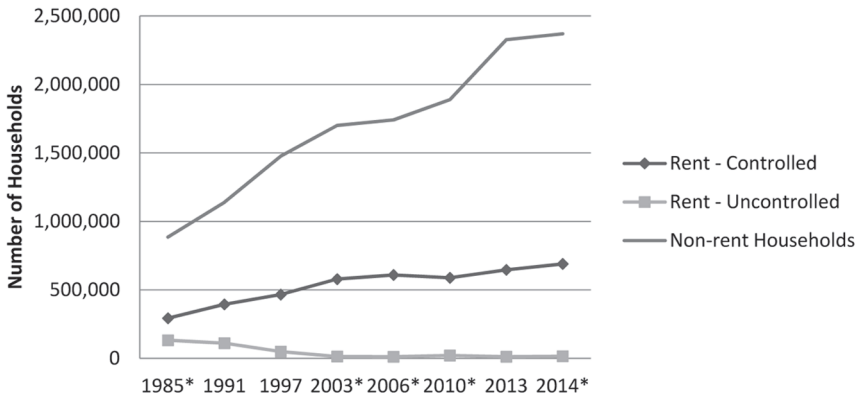
Looking at the data from 1985 to 2014 (Figure 2), there has been significant increase in the proportion of families in the controlled sector. The trend shows that most rental housing units are increasingly under the coverage of rent control, but this growth should not be misconstrued as a positive effect of rent control. As mentioned earlier, rent ceiling can be raised whenever a new rent control law is legislated. Between 1985 and 2002, the rent ceiling was raised to PHP 7,500 covering new units that were previously exempted from rent control. This was further raised to PHP 10,000 in 2005 and the succeeding years. This implies that the growth of rental units in the controlled sector is partly the effect of the expanded coverage. In effect, the current rent ceiling of PHP 10,000 discourages renting and, consequently, rental investments above PHP 10,000 since housing units in Metro Manila can be owned for a lower amount of PHP 8,000 per month loan amortization. Over time, the supply of affordable housing market for ownership has become more competitive with the

Figure 1. Residential types of households in Metro Manila in 2014



Basic data source: *Family Income and Expenditure Survey (FIES)* (1985–2006) and *Annual Poverty Indicators Survey (APIS)* (2004, 2007, 2008, 2010, 2011, 2013, 2014), Philippine Statistics Authority (PSA)

Figure 2. Growth of renter-families in the controlled and uncontrolled sector, selected years



Basic data source: FIES (1985–2006) and APIS (2004, 2007, 2008, 2010, 2011, 2013, 2014), PSA  
 \* Years when a new (or revised) rent control law was implemented (see Appendix 2).  
 Nonrent households = include owners and households in nonformal arrangements

entry of several low-cost housing developers and the National Housing Authority (NHA), which continue to undertake production of socialized housing for families up to the 5th income decile.

A recent profile of renter-households in Metro Manila shows that families who rent in the controlled sector pay on the average rent of about PHP 3,299 with mean monthly family income of PHP 25,141 (Table 1). About 40 percent of these families pay monthly rent of PHP 2,000 or less, 32 percent pay PHP 4,000 or less, and 28 percent pay between PHP 4,000 and PHP 10,000. The data indicate that those who rent in the controlled sector are mostly nonpoor families and only 1.4 percent (about 9,500 families) have been classified as poor.

Most renter-families have incomes eligible to take housing loans either from the Home Development Mutual Fund (HDMF), microfinance institutions, or development banks, but they chose to rent, possibly, for several reasons such as preference for mobility or unmet housing requirement (given income constraints) by the existing housing market. Note that most renters (70%) in the controlled sector comprise of couples married or living together with an average family size of four. The rest of the families are either single or widowed or separated but have an average family size of four.

Table 1. Profile of renter-families in the controlled and uncontrolled sector

Characteristics	Controlled Rent Prices			All Controlled	No Rent Control
	PHP 2,000 or Less	More than PHP 2,000 to 4,000	More than PHP 4,000 to 10,000		
Distribution (in %)	40	32	28	100	
Mean monthly rent	1,490	3,107	6,118	3,299	14,518
Mean monthly family income	17,015	23,700	38,482	25,141	68,114
Mean Monthly Family Expenditure	15,662	22,748	38,917	24,414	45,853
Rent to income	8.7	13.1	15.9	13.1	21.3
Family size	4	4	4	4	3
Did work or had a job or business anytime from January 1 to June 30, 2014 (in %)					
Employed	95	80	76	85	100
Unemployed	5	20	24	15	0

Basic data source: 2014 APIS, PSA

Note: APIS 2014 covers January–June 2014.

As of 2015, NHA condominium units for medium-rise buildings (MRBs) in Metro Manila are sold at PHP 550,000 with monthly amortization of PHP 3,700.<sup>2</sup> On the other hand, private developers can undertake production of affordable housing in Metro Manila at PHP 1,200,000–P1,500,000 per unit for a monthly amortization of PHP 8,000–PHP 10,000. But even if it is commonly perceived that owning is better than renting, many families continue to rent.

In many countries, renting is an essential component of affordable housing. However, the rental market in Metro Manila appears to be a neglected sector. While homeownership is supported by incentives to developers, the rental housing market is constrained by rent regulations that tend to discourage investments in rental housing. Moreover, owners of rental housing tend to offset the impact of

<sup>2</sup> Estimated based on a 7.0-percent interest rate for 30 years. Covers principal + interest.

rent control regulations by eliminating maintenance services. In other words, in essence, tenants may pay lower rents but end up footing the bill when major repairs are needed.

In the United States, property owners are penalized for nonmaintenance of critical services (Sims 2007), so tenants under a rent control regime experience a significant benefit with reduced cost in maintaining critical services. The implication is that, without a separate regulation on maintenance of critical services, these services will most likely be affected as well. In Metro Manila, evidence shows that the quality of some types of controlled units is lower than that of similar uncontrolled units, without a similar provision regarding critical services.

APIS data above show that units rented at PHP 2,000 or less per month are lacking in basic services and are congested (Table 2). More than one-fourth of renting families in this sector sourced water from public tap or communal tap outside their dwelling units or from water peddlers. Shared toilet facilities are common; 35 percent of renting families have shared toilets and about 5,000 families have no toilet facilities.

Most families also contend with smaller space, with one person occupying less than the minimum standard of 5 square meters per person. Tenants may be willing to live in a crowded apartment because they cannot find affordable apartment that is properly sized.

For families renting between PHP 2,000 and PHP 4,000 per month, rental units have better toilet facilities, but access to water is still limited and congestion is still evident with almost 80 percent of the families occupying a space of less than 9 square meters per person. Rental units above PHP 4,000 per month show improved facilities, but there are some units that still provide shared toilet facilities. Comparing the rental units with NHA, profit-adjusted rents show that the dwelling units occupied by the renter-households are overpriced for the same dwelling size.

The above results show that there is little evidence of benefit to most renters in the controlled sector. Rather, an estimate of the net benefits shows that negative net benefits are plausible. Instead of tenants, it is the landlords who benefit more from regulated rent control (Table 3).

There is evidence that the effective quantity of housing services, specifically for the low-income groups, is substandard and some families could have better housing services and pay the same price in owner-occupied housing. Moreover, the distribution of benefits, in cases when positive, is regressive. So while the poor and low-income families contend with expensive substandard housing, higher-income groups get better housing.

Table 2. Comparison of dwelling characteristics of rental units with NHA medium-rise building units in NCR (in %)

Dwelling Characteristics	Rent Prices			
	Controlled			NHA Five-Storey MRBs <sup>a</sup>
	PHP 2,000 or Less	More than PHP 2,000 to 4,000	More than PHP 4,000 to 10,000	PHP 2,641 <sup>a</sup>
<i>Total number of renting families</i>	274,954	223,282	191,583	600
Main source of water supply				
Community water system piped into:				
Dwelling	74	91	100	100
Yard/Plot/Public tap	8	5	0	0
Point source <sup>b</sup>	18	3	0	0
Kind of toilet facility used				
Flush toilet				
Own toilet	63	89	94	100
Shared toilet	35	11	6	
Pit toilet/Latrine <sup>c</sup>	2	0	0	0
Type of roof construction materials				
Strong materials <sup>d</sup> or mixed but predominantly strong materials	93	100	99	100
Light materials <sup>e</sup> or mixed but predominantly light materials	7	0	1	0
Presence of electricity				
With electricity	99	100	100	100
Without electricity	1	0	0	0
Type of structure of rental units				
Single house	53	47	54	0
Duplex/Apartment/Accessoria/Condominium/Townhouse	47	53	46	100
Floor area per person				
5 or less	39	31	14	100
From 5 sq m to 11 sq m	35	46	35	0
More than 11 sqm	26	23	51	0

<sup>a</sup> NHA rental rates are based on cost recovery rates and include maintenance and administration cost for five-storey MRBs in Metro Manila. Average rent for 10 years is based on projected increase in rent and other costs and adjustment to include 50-percent markup.

<sup>b</sup> Point source water can be any of the following: protected well, unprotected (i.e., open dug well), developed spring, undeveloped spring, river, stream, pond, lake, dam, rainwater, tanker truck, peddler, neighbor.

<sup>c</sup> Types of pit toilet or latrine can be any of the following: closed pit, open pit, drop, overhang, pail system, none (no toilet; only field or bush).

<sup>d</sup> Types of strong materials include: galvanized iron, aluminum, tile, concrete, brick, stone, etc.

<sup>e</sup> Types of light materials include: *cogon*, *nipa*, *anahaw*.

NHA = National Housing Authority; NCR = National Capital Region; MRB = medium-rise building; sq m = square meter

Basic data source: 2014 APIS, PSA

Note: APIS 2014 data cover January–June 2014.

Table 3. Estimated net benefit (or subsidy) by decile group

National Per Capita Income Groups <sup>a</sup>	Range of Monthly Net Benefit <sup>b</sup> (in PHP)	Average Monthly Net Benefit <sup>b</sup> (in PHP)
1st to 3rd national per capita income deciles	-1,905.61 to 5,015.74	746.18
4th to 6th national per capita income deciles	-3,552.19 to 6,652.84	1,847.72
7th to 10th national per capita income deciles	-3,534.45 to 26,044.05	1,742.87

<sup>a</sup> Column on national per capita income groups combines national per capita income deciles families generated from APIS 2014

<sup>b</sup> Net Benefit = Predicted Controlled Rent - Actual Controlled Rent

Basic Data Source: 2014 APIS, PSA

The picture that emerges in the case of Metro Manila is that the benefits of rent control are not captured by the poor and low-income households. Clearly, less stringent rent control schemes do not undo the unintended consequences of rent control. Even more alarming, the data imply that benefits are enjoyed by the landlords rather than the tenants with the substandard quality of housing services while tenants are paying more than what they would have paid for better housing facilities.

While the government has relaxed the rent control law through vacancy decontrol and partial coverage, the law provides constraints to lessor's conversion of property. Uncertainty of future regulatory environment on rent control (e.g., raising rent ceiling) will also lead to postponement in rental investments. Moreover, the policy bias toward homeownership including maximum tolerance on informal settlements (e.g., Lina law) has resulted in the development of rental markets in slums or poor neighborhoods to meet the increasing demand for affordable rental housing in the city.

The main issue is the lack of affordable and decent rental housing in the market. Rent control law is apparently not the appropriate policy to address this problem of housing the poor and marginalized households or of encouraging investments in affordable rental housing.

## What if rent control is lifted?

First, it will not lead to exorbitant increase in rental prices.

This fear is unfounded. Households who rent in the controlled market are income constrained and are willing to spend only an average of 13 percent of monthly income to pay for rent (the proportion is lower for those in the lower income decile [refer to

Table 1]). Thus, more than 70 percent of renting households live in rental houses that are way below the rent control ceiling of P10,000. The supply of rental market targets specific clientele, thus increasing rents beyond what their target market can absorb is putting their rental business out of the market.

In recent years, real estate developers have been very aggressive in the development of affordable condominiums for ownership, partnering with banks and the HDMF for low interest rate and low monthly amortization. Some developers also offer rent-to-own schemes at rates close to the controlled market but of better housing quality.

Second, it will eliminate the uncertainty caused by repeated extensions of the rent control law.

Uncertainty discourages investment in the sector since rules are bound to change whenever the law is extended (Appendix 2). Despite the proliferation of condos in Metro Manila, there is a large segment of Metro Manila households that cannot afford to own houses suitable for the average family size of four. Small-spaced condos may be suitable for single households or a couple but not for the average-sized household, but amortization for bigger-sized condos (about 40 sq m) would require a minimum family income of PHP 70,000 per month.<sup>3</sup> This means that the average-sized to large families with incomes below the 8th income decile are the potential market for low-cost rental housing.

Given limited rental units of such size, the likely effect is high rental prices but because the clientele are income constrained, the supply gap is translated not through prices but through nonprice mechanism such as poor quality rental housing; rental houses that lack basic services, shared toilets, and kitchen, and are located in poor neighborhoods, etc. (Table 2). This is also evidenced by the negative net benefits of rent control among renting households (Table 3). The negative net benefits imply that the landlords, not tenants, receive the perceived income transfer from lower rents because units are overpriced. Lifting rent control and giving incentives to property owners will encourage more investments in affordable rental housing and increase competition in the market.

Third, the end of rent control law is unlikely to lead to increase eviction.

Rent control has also been enacted to address the issue of security of tenure. Security of tenure in rental housing, aside from affordability issue, is also an important societal objective. There are views that the tenant has no recourse against

---

<sup>3</sup> Minimum floor area for low- to medium-cost condo projects is 22 sq m (Presidential Decree 957). Based on average family size of four; minimum space per person is 5 sq m.

eviction that may arise from the uncertainty of future rent prices and lessors' possible conversion of property to other uses due to profitable opportunities available in the market. This argument is valid but the unintended consequences of the rent control law could outweigh the possible improvement in security of tenure arising from stricter laws on conversions and rent increases. Moreover, security of tenure could be addressed in other ways (e.g., lease agreements) without creating distortions in the housing market.

It is observed that most rental houses in Metro Manila that are covered by rent control (monthly rental below PHP 10,000) are owned by small property owners (single homes, accessorias, townhouses in existing residential areas) and some are constructed within the family lot or extensions of owners' houses. Most property owners in rental housing business are small scale and engage in the business to augment income or utilize idle land/property. These owners are unlikely to evict tenants on the basis of potential conversion of the property for commercial use. Moreover, cases of eviction in rental homes are mostly due to nonpayment of rent rather than undue reasons. Nonpayment of rent is also the reason often cited by landlords for them to evict tenants (Ballesteros 2004).

Lastly, there are a number of better policy alternatives to protect tenants and make affordable housing available to the poorest sectors of society.

The government could look into subsidizing rental assistance or housing allowance. Compared to rent control, rental assistance reduces the problem of affordability providing marginalized households or those who need housing support most a choice to live in better environment rather than be "locked in" poor neighborhoods. Rental assistance also promotes investments in rental housing and can discourage the development of rental housing in slums (since the program can be confined to rental housing units in lands with formal or legal rights). The subsidy to a rental assistance program can be supported by improvements in property tax base.

Adopting rental assistance would also mean a shift of government policy away from public provision of housing, which is costlier and less efficient than direct income transfers. It also means a review of the rationale for expanding financing support to informal settlements that tend to encourage professional squatting. Public rental housing administered by local governments can also be considered as an alternative program, but the commitment of the local authorities to this program on a sustainable basis needs to be further studied.



## Appendixes

### Appendix 1. Formula for computing housing subsidy

$$\text{SUBSIDY (NET BENEFIT)} = \widehat{R}_c - R_c, \tag{1}$$

Where  $\widehat{R}_c$  = estimated uncontrolled rent of the controlled unit  
 $R_c$  = actual rent paid on the controlled unit (observed)

To estimate the uncontrolled rent of a controlled unit, a hedonic rent function is applied to the uncontrolled sector (i.e., the rental units not covered by rent control). The hedonic equation is represented as a function of housing traits as follows:

$$R_{iu} = h(Z_{iu} \cdot \beta_u) + e_{iu} \tag{2}$$

Where  $R_{iu}$  = actual rent paid on uncontrolled units  
 $h(Z_{iu} \cdot \beta_u)$  = function of housing traits of uncontrolled units  
 $Z_{iu}$  = housing traits in the uncontrolled sector  
 $\beta_u$  = regression parameter vector  
 $e_{iu}$  = error term

The uncontrolled rent of the controlled units is derived from a function of housing traits ( $Z_i$ ) and estimated coefficient factor  $B_u$

$$R_{ic} = h(Z_{ic} \cdot \widehat{\beta}_u) + e_{ic} \tag{3}$$

Where  $R_{ic}$  = estimated uncontrolled rent of the controlled unit  
 $Z_{ic}$  = housing traits of the controlled units  
 $\widehat{\beta}_u$  = estimated coefficient vector from (2)

## Appendix 2. Rent control laws in the Philippines, 1971–2009

Rent Control Law and Effectivity Date	Key Provisions	Rent Ceiling (PHP/month)	
		NCR and Other HUCs	All Other Areas
RA 6359 (July 1, 1971–June 1, 1972), An act to regulate rentals for two years and penalizing violations thereof	Stabilize the prices of basic commodities and rentals for housing. Rents cannot be increased by more than 10 percent next year.	300	
PD 20 (October 12, 1972–March 10, 1979), An act amending certain provisions of RA 6359	Freezing of rentals for the lower income group at their present levels	300 + rent units previously covered	300 + rent units previously covered
BP 25 (April 10, 1979–April 9, 1984), An act regulating rentals of dwelling unit	Authority to increase rent by 10 percent yearly. Exempt new residential units	300 + rent units previously covered	
BP 877 (July 1, 1985–December 31, 1987), An act providing for the stabilization and regulation of rentals of certain residential units	Authority to increase rent by 10 percent in the first year and 20 percent in the second and third years. No decontrol. Exempt new residential units	480	
RA 6643 (January 1, 1988–December 31, 1989), An act further extending effectivity of BP 877	First extension of BP 877. Authority to increase rent by 20 percent. Exempt new residential units	480 + rent units previously covered	
RA 6828 (January 1, 1990–December 31, 1992), An act further extending effectivity of BP 877	Second extension of BP 877. Authority to increase rent by 20 percent. Exempt new residential units	480 + rent units previously covered	
RA 7644 (January 1, 1993–December 31, 1995), An act further extending effectivity of BP 877	Third extension of BP 877. Authority to increase rent by 20 percent. Exempt new residential units	480 + rent units previously covered	
RA 8437 (January 1, 1998–December 31, 2001), An act further extending effectivity of BP 877	Fourth extension of BP 877. Authority to increase rent by 15 percent. Exempt new residential units	480 + rent units previously covered	
RA 9161 (January 1, 2002–December 31, 2005), Rental Reform Act of 2002	Make available at affordable cost decent housing and basic services to underprivileged and homeless citizens in urban centers and resettlement areas. Allowable rent increase of 10 percent yearly. Exempt new residential area	7,500	4,000
RA 9341 (January 1, 2006–December 31, 2009), Rental Reform Act of 2005	Allowable rent increase of 10 percent yearly. Vacancy decontrol; lessors can set initial rent upon vacancy. Exempt new residential units	10,000	5,000
RA 9653 (July 1, 2009) Rent Reform Act of 2009	Allowable rent increase of 7 percent yearly. Vacancy decontrol. Exempt new residential units. HUDCC granted the authority to continue the rental regulation after July 2013.	10,000	5,000

NCR = National Capital Region; HUC = highly urbanized city; RA = Republic Act; PD = Presidential Decree; BP = Batas Pambansa; HUDCC = Housing and Urban Development Coordinating Council  
 Source: Authors' compilation

## References

- Arnott, R. 1997. Rent control. Working Paper 391. Chestnut Hill, MA: Department of Economics, Boston College.
- . 2003. Tenancy rent control. *Swedish Economic Policy Review* 10:89–121.
- Ballesteros, M. 2004. Rental housing for urban low-income households in the Philippines. PIDS Discussion Paper No. 2004-47. Makati City, Philippines: Philippine Institute for Development Studies.
- Downs, 1988. *Residential rent controls: An evaluation*. Washington, D.C.: The Urban Land Institute.
- Jenkins, B. 2009. Rent Control: Do economists agree? *Econ Journal Watch* 6(1):73–112.
- Philippine Statistics Authority (PSA). Various years. *Annual Poverty Indicators Survey*. Quezon City, Philippines: PSA.
- . Various years. *Family Income and Expenditure Survey*. Quezon City, Philippines: PSA.
- Sims, D.P. 2007. Out of control: What can we learn from the end of Massachusetts rent control? *Journal of Urban Economics* 61(1):129–151.
- Turner, N. and S. Malpezzi. 2003. A review of empirical evidence on the costs and benefits of rent control. *Swedish Economic Policy Review* 10(2003):11–56.

## Chapter 8

# Planting Seeds of Self-Defeat: Effects of Unrealistic Regulations on the Caraga Wood Industry and Forest Conservation

Vicente B. Paqueo and Danilo C. Israel

### Abstract

Years of rapid and indiscriminate logging of Philippine forests coupled with little reforestation have led to more frequent, widespread, and damaging natural disasters such as floods, landslides, and other environmental



damages. With strong political will and noble intentions, President Benigno S. Aquino III issued Executive Order (EO) 23 in 2011, which sought to protect the country's natural forests by totally banning logging activities in natural and residual forests and imposing stronger measures against illegal cutting. Unfortunately, EO 23 intensified the rent-seeking behavior among the regulating agencies and has led to damaging unintended economic, social, and environmental consequences without accomplishing much of its avowed objectives. Moreover, there are other potentially more effective ways of protecting Philippine forests. On this score, would it be possible to achieve a win-win strategy where natural forests are effectively protected without paralyzing the wood industry that provides incomes and jobs?

## Deforestation: Its impact and underlying causes

Deforestation<sup>1</sup> has been a major natural resource and environmental issue in the Philippines with the country losing as much as 10 million hectares of forests since the 1930s. Back in 1934, forests comprised a significant 57 percent of the country's total land area. By 2010, however, the forest cover has fallen to only 23 percent. In 2011, it was estimated that the country had only around 7.2 million hectares<sup>2</sup> of forests left (Carandang et al. 2013). From 2000 to 2005, the annual forest cover loss was estimated at 157,000 hectares. Overall, the Philippines is among those countries with the highest deforestation rates in the world.

Globally, the costs of deforestation are as significant as the problem itself. The annual loss of tropical forests represents a loss in forest capital valued at USD 45 billion (Tejaswi 2007). In the Philippines, the total foregone value of resources lost due to losses in forest areas from 1992 to 2003 was estimated at around PHP 118.2 billion for an annual average of PHP 10.7 billion (Carandang 2008). Aside from the direct economic impact, there are numerous biophysical short- and long-term costs: watershed destruction, biodiversity loss, excessive carbon discharges, soil erosion and loss of soil

<sup>1</sup> Deforestation is defined as the conversion of forested areas to nonforest land use such as arable land, urban use, logged area, or wasteland. According to the Food and Agriculture Organization, it is the conversion of forest to another land use or the long-term reduction of the canopy cover below the 10-percent threshold (Tejaswi 2007).

<sup>2</sup> This figure is already a dramatic rise from recorded forest area in 1997 of 5.392 million hectares. However, this increase is mainly due to a change in the forest definition from earlier 40-percent crown cover to 10-percent crown cover in 2011, which resulted in inclusion of those areas that were not defined as forests before (Carandang et al. 2013).

fertility, desertification, freshwater loss, landslides, and flash flooding, among others. Negative socioeconomic effects of deforestation include lost agricultural and forestry outputs that lead to reduced incomes, marginalization of upland communities including cultural minorities, increased morbidity and mortality, and loss of property due to the loss of forest protection against natural disasters.

While the actual costs specifically of floods and landslides due to deforestation have yet to be quantified for the Philippines, these are significant as well. Generally, natural disasters have resulted in great loss of lives, homes, livelihood, and services in the country (SEPO 2013). From 2000 to 2012, the death toll attributed to natural disasters reached 12,899 in addition to causing injury to 138,116 persons. In the same period, they affected more than 71 million individuals and rendered almost 375,000 persons homeless. In totality, the socioeconomic damages of natural disasters in the country have been estimated at USD 3.37 billion with average annual damages of USD 251.58 million.

In general, the direct causes of deforestation include logging, land conversion of forests for agriculture and cattle raising, urbanization, mining and oil exploitation, acid rain, and fire (Tejaswi 2007). Logging, whether legal or illegal, was identified as a direct driver of deforestation and forest degradation (Carandang et al. 2013). The underlying causes of deforestation are multiple and interrelated. For example, macroeconomic strategies implemented provide a strong incentive for short-term profit making instead of long-term sustainability. Corollary to that, deep-rooted social issues—inequalities in land tenure and discrimination against indigenous peoples, subsistence farmers, or poor people in general—exacerbate the problem. Other important underlying causes are related to governance such as weak institutional capacities, weak law enforcement, corruption, and collusion.

## **Solving the problem through EO 23**

Over time, program and project initiatives from the Philippine government and other sectors to address deforestation and forest degradation have been executed and reviewed (Israel 2015). Likewise, various policies implemented to address deforestation, including logging ban and moratorium policies, have also been assessed for their effectiveness (e.g., Carandang et al. 2013), but judging from the continued persistence of the problem, it has become apparent that these programs, projects, policies as well as the overall efforts to tackle deforestation can only be judged as partially successful, if not a total failure.

Executive Order (EO) 23, titled “Declaring a moratorium on the cutting and harvesting of timber in the national and residual forests and creating the Anti-Illegal Logging Task Force”, was issued by President Benigno S. Aquino III in February 2011. EO 23 implemented an indefinite log ban in the country. It supersedes all executive orders, rules and regulations, and other issuances that are inconsistent with the order. Among others, EO 23 restricted the Department of Environment and Natural Resources (DENR) from issuing logging permits and contracts in all natural and residual forests, including renewing tree cutting permits in all forests all over the country. EO 23 also tasked the DENR to prohibit the operation of sawmills, veneer plants, and other wood processing plants that are unable to present proof of sustainable sources of legally cut logs for a period of at least five years within one month from its effectivity. Furthermore, it ordered the DENR to strictly implement a forest certification system in accordance with the United Nations standards and guidelines to ascertain the sustainability of legal sources and chain of custody of timber and wood products nationwide. As exception to the rule, EO 23 stated that tree cutting associated with cultural practices pursuant to the Indigenous Peoples’ Rights Act may be allowed, but subject to existing guidelines of the DENR.

While there is no available study at present that analyses in detail the actual effects of EO 23 at the national level, Durst et al. (2001) explained that in the Asia-Pacific, logging restrictions—though intended to halt deforestation—more often led to negative impacts. In particular, the Philippines’ total ban on logging in old-growth forests in the 1990s resulted in intensified harvesting of secondary forests that diminished the opportunities for rehabilitation and maturation into high-quality stands (Carandang et al. 2013). More recently, the *Philippine Daily Inquirer* (2012) reported that EO 23 has not stopped illegal logging despite the existence of the Anti-Illegal Logging Task Force. Reportedly, illegal logging thrives and has intensified because EO 23 has only stopped legitimate logging by holders of long-term licenses, contracts, and agreements.

## How EO 23 affected the Caraga timber industry

The general intention of EO 23 is laudable and it could have significantly reduced the overexploitation of natural forests in the Philippines. Unfortunately, we argue that EO 23 resulted in negative consequences for the wood industry, its different stakeholders, the forestry sector, and the entire country.

Evidence from a study (Paqueo and Silfverberg 2016) recently conducted to analyze the performance of the wood industry in the Caraga region or Region XIII

covering the provinces of Agusan del Norte, Agusan del Sur, Surigao del Norte, and Surigao del Sur, shows the actual and potential effects of EO 23. Using primary and secondary data, and employing focus group discussions and key informant interviews to collect data and information, the findings of the study saw the following unintended consequences of EO 23.

### **Decline of wood processing enterprises**

First, by enhancing conflicts between economic development and environmental protection, EO 23 favored the latter at the expense of the former. In doing so, the slow development of logging-dependent areas and the countryside was apparent. After the issuance of EO 23, the number of wood processing enterprises (WPEs) in Caraga drastically declined from 119 in 2010 to 27 at present (Table 1).

The most important reason for this decline was that the wood processing permits of many existing plants were not renewed due to noncompliance of the requirement for plants to have a five-year log supply stock. Critics have pointed out that the government is asking for a five-year supply of logs, when the license to operate is only for three years, with approval being temporary for the first year.

Another reason for the decline in the WPEs is the order's indefinite moratorium against the approval of new wood processing permits (WPPs),<sup>3</sup> thus there are no new WPEs during this period. As a consequence, the decrease in the number of WPEs during the implementation of the EO has led to halving the annual log requirement of the region from 1.17 million cubic meters to 557,000 cubic meters.

### **Increased rent-seeking**

Second, overregulation imposed by EO 23 incentivized rent-seeking that led to corruption among government regulators and their associates. Bribes have been demanded to facilitate government authorizations of permits and other requirements.

For instance, although there are only three legitimate composite checkpoints in the region, the actual number of checkpoints when delivering to Butuan can reach up to 14 and up to 20 for delivery to Cagayan de Oro. This increase in checkpoints may have also increased the potential for standard operating procedure or "SOP" fees which presently could be as high as PHP 5,000–PHP 6,000 for delivery to Butuan City alone.

Another form of illegitimate fees in the wood industry of Caraga at present is the overcharging of "overloading" fees at the weighbridges, which is done

<sup>3</sup> Even if approval of new WPPs were allowed, the high cost, hassle, and uncertainty of getting a permit along with other issues also discussed here would have most likely discouraged investors from applying for a license to operate.



Table 1. Wood processing enterprises in Caraga before and during EO 23

Type of Wood Processing Enterprise	Before EO 23	During EO 23
Integrated wood processing plants (Veneer, plywood/blockboard, mini-sawmill)	10	10
Veneer/Plywood plant	9	0
Veneering with mini-sawmill component	19	13
Sawmill plant	7	0
Mini-sawmill	68	1
Re-sawmill	2	0
Match factory	1	1
Match splinting	1	1
Wood treating plant	1	0
Fiber board plant	1	1
Total	119	27

Source: Status of Caraga wood industry, Department of Environment and Natural Resources (2015)

three times a year. The amount charged ranged from an excess of PHP 200 up to PHP 2,300 per truck of the PHP 500 penalty in the official receipt (i.e., payment of PHP 700–PHP 2,800). Furthermore, there is the fee imposed by the Bureau of Internal Revenue of PHP 22.50 per cubic meter of timber, which the growers of planted species, such as *falcata*, are supposed to be already exempted from.

### Increased costs of doing business

Third, stricter implementation results in significant direct and indirect economic costs from the producers down to the consumers at the end of the supply chain. These include transaction costs, administration costs, and enforcement costs for government; direct compliance costs, such as those related to proving the origin of timber, for producers; and indirect costs for consumers and downstream industries, such as when compliance costs are passed on in the form of increased input and output prices.

Even before 2010, the wood industry in Caraga, and the Philippines for that matter, was already heavily burdened by a plethora of fees, taxes, and related costs that make operating in the wood industry costly, unpleasant, and time consuming. With the implementation of EO 23, the costs of doing business have become even higher ranging from 13 to 14 percent of the total cost of timber production and transport to wood processors (Box 1). These costs do not include the discouragement

effect of the hassle and aggravation of dealing with rent-seekers and the monetary and opportunity cost of going around the bureaucracy and traveling to Manila for approvals. Income, property, and other standard taxes are also not included, as well as revolutionary taxes and requests for ‘voluntary contributions’.

Corollary to that, rural livelihoods of small-scale timber production are gravely affected as they were invariably unable to comply with the required paperwork to legally operate.

### Box 1. How EO 23 is damaging Caraga’s falcata industry and the social fabric

*This is the story of Mang Fernando, manager of a plantation located in one of the poor barangays of Surigao province. His name is fictitious for security reason, but the facts behind his story are true.*

In the first decade of the 21st century, Mang Fernando planted thousands of falcata trees. Being a *segurista*, he registered them in the DENR immediately after plantation. After seven years of nurturing and protecting them, a portion of the planted trees was ready for harvest.

Before harvesting the trees, though, Mang Fernando had to request DENR to conduct an inventory of the number of trees in the plantation. For the inventory, Mang Fernando had to pay for the labor of the counters assigned by DENR. He had to pay PHP 660 per hectare for the inventory plus food and drinks. What should take half a day of work by one person was being done by three people in three days at a rate that was several multiples of the average wage of unskilled labor.

Mang Fernando was lucky to have gotten DENR to arrange for the plantation inventory and for it to be completed in a few weeks. A friend of his (also a falcata farmer) was not so lucky. It took DENR five months to respond to his friend’s request to harvest the trees.

With inventory done, Mang Fernando could now apply at the City Environment and Natural Resources Office for permit to transport the harvested logs, attaching the inventory to the Self-Monitoring Form (SMF). An approved SMF (a permit to transport) cost Mang Fernando PHP 2,700 per truck. The farmer got in return an official receipt of PHP 50 per truck (the official price). With this permit, the buyer of his logs could now deliver his truckloads of falcata timbers to a wood processing plant in Butuan City. Along the way, he had to make payments to the barangay where his farm is located and to two other barangays for passing through their road to reach the national highway. There, the logs had to be loaded to a 10-wheeler, which carried the timber to Butuan City.

Trucks carrying falcata logs are stopped and checked for illegal logs. These checkpoints have become platforms to extract grease money. Since the issuance of EO 23, there are more checkpoints and more rent-seekers, including members of the multiagency task force organized to implement EO 23's log ban. Before, only DENR personnel had the authority to stop and inspect trucks carrying logs. It is now standard practice among log haulers and traders to budget for more grease money, euphemistically called SOPs. For delivery to Butuan City, the "SOP" payments at various checkpoints cost a total of about PHP 6,000 per truck. In comparison, the cost for SOPs from Tagbina, Surigao del Sur to Cagayan de Oro is about PHP 7,500 per truck.

All in all, Mang Fernando had to pay about PHP 3,760 per truckload of logs for SOPs at checkpoints. This expense plus the payment for the inventory and permit to transport amounted to about 10–15 percent of the price per cubic meter of falcata timbers delivered to the wood processing plant. This figure also includes the value of the time spent by him and his assistant complying with bureaucratic requirements.

This amount could have been higher because of unjustified bureaucratic delays in the signing of the permit to transport. Many of the delays in approval are not innocent. They often occur to put pressure on the permit applicant to accede to illegitimate demands of the person in charge of approving permits. Mang Fernando knows of friends who were pressured and had to accept a "bloated" inventory estimate. Yes, bloating is a standard jargon among rent-seekers to refer to a common practice. Bloating provides legal cover for transporting illegally cut logs. This cover is sold for a hefty price (PHP 4,500/truck) to traders/haulers transporting those logs.

In light of the lucrative practice of providing legitimate cover for the transport of illegal logs, Mang Fernando wondered about the impact of EO 23. How can one possibly claim that the total log ban of EO 23 works, when for the right amount of money, the enforcers of the ban themselves provide the cover for the transport of the truly illegally cut logs?

Living conditions were also affected as large numbers of rural households squatting on lands that the government has classified as state-owned forestland or protected areas were affected by EO 23.

### **Reversion to open access forestry**

Lastly, EO 23 discouraged the practice of and investment in private tree planting as it may create the uncertainty that planters may not be able to harvest the trees

they plant. Even if harvest is possible, planters are still unsure of the profitability and economic viability of tree planting given the increased economic costs and corruption involved.

The banning of selective logging under Integrated Forest Management Agreements may have inadvertently shifted the management regimes of forestlands in Caraga from the more common integrated systems of recent years back to the common access mode of the past.

The Surigao Development Corporation (SUDECOR) experience provides an exemplary case. Under new guidelines for the implementation of EO 23, SUDECOR was made to stop selective cutting of trees in its area of natural forest coverage. As a result, SUDECOR could no longer afford to sustain the maintenance, development, reforestation, and security operations. Ultimately, SUDECOR had to close down its operations. With the closure of SUDECOR and the lack of government monitoring and enforcement, the area has reverted to open access where many illegal loggers, *kaingin* farmers, and informal settlers abound.

## Conclusions

Years of rapid and indiscriminate logging of Philippine forests coupled with little reforestation have led to more frequent, widespread, and damaging natural disasters such as floods, landslides, and other environmental damages. With strong political will and noble intentions, President Benigno S. Aquino III issued EO 23 in 2011. This order sought to protect the country's natural forests by imposing a total ban over logging activities and imposing stronger measures against illegal cutting.

Unfortunately, EO 23 has failed to achieve its avowed objective of stopping the cutting of trees in natural growth and residual forests. It has also adversely impacted the timber and wood processing industry within a relatively short time of five years of implementation. If left unchecked, there can be more potential adverse effects in the years ahead. Clearly, there is a need to redesign EO 23 and its implementation.

The fundamental reason for the failure and damaging impact of the executive order is due to its lack of realism. That is, the policymakers of EO 23 and its implementation rules underestimated the power of increased corruption that the order would unleash. As it turns out, they created lucrative opportunities and incentives for rent-seeking that are so powerful they end up defeating the avowed objective of the executive order. The Caraga case study of Paqueo and Silverberg (2016) illustrates the above narrative.

Concretely, the policymakers of EO 23 planted the seeds of its own defeat by not paying adequate attention to the intensification of corrupt practices they were bound to unleash. The practices encouraged and enabled illegal loggers to cut trees in natural growth forests and to transport and sell them with impunity despite all the checkpoints. Meanwhile, the stricter control measures imposed after the issuance of EO 23 ironically penalized socially responsible commercial tree planters and private organizations practicing sustainable forest management. As a consequence, the cost of doing business in the entire wood industry value chain increased due to the following specific reasons.

First, EO 23 increased the number of agencies and persons assigned to implement stricter control measures. These, along with the increased number of authorities involved, led to the dramatic proliferation of checkpoints, each of which became platforms for extorting illegal fees from trucks carrying logs like *falcata*, *bagras*, *gemilina*, and other planted species.

Second, EO 23 became a pretext to maintain and impose more and stricter permit or documentation requirements for the registration, inventory, cutting, and hauling of logs grown by tree farmers. Most of these requirements, which are unnecessary or have little social value, have created more opportunities for lucrative rent-seeking.

Third, as the direct result of EO 23, the issuance of new WPPs has stopped; and the renewal of WPPs of existing firms has become stricter, increasing side payments by wood processing investors and reducing expected long-run demand for locally planted timbers. On this score, the number of wood processing firms tumbled precipitously. All these taken together have clearly weakened the social fabric of Caraga. Equally important, they are impeding the generation of jobs and incomes badly needed by the people of the region.

## Reflections

So, what can be done as an alternative? This is not the place to have an elaborate discussion of the various options. We, therefore, limit our remaining discussion to outlining an example of an alternative strategy. This example has been proposed and detailed in Paqueo and Silfverberg (2016) for the Caraga region. To be clear, the applicability of the proposal to other localities would need to be validated.

The heart of the proposal is the recognition that a more holistic but realistic approach is needed for a sustainable, effective, and economically sensible alternative strategy—one that would be a win-win for both conservation of natural growth forests

and generation of jobs and income. In Caraga, the strategy would consist concretely of the following components: (i) the development and implementation of cost-effective control of illegal logging, (ii) faster and sustained expansion in the number and quality of industrial trees planted, and (iii) retooling and modernization of wood processing plants. Concrete examples of specific measures under each component are given in the longer technical paper of this chapter.

This holistic strategy would have the following notable advantages. The first component would make control of illegal logging more effective and would reduce the cost to tree planters, timber haulers, and wood processing firms. A key idea in this component is to focus resources on on-site inspection activities at two sites only: at the forests to be protected and at the wood processing plants. Inspection at highway checkpoints for illegal logs would be prohibited. In Caraga, this approach would be practical because more than 95 percent of logs transported and processed are planted species, which can easily be identified at those two sites. The second proposed measure would do away with registration, inventory, and permit requirements for harvesting and transporting trees planted by farmers. These requirements serve very little purpose, except as occasions for rent extraction.

Third, greater availability of commercial trees would provide ample supply of logs for more wood processing plants. This increase in market supply along with more effective control of illegal logging through on-site inspection would reduce the need for enterprises and log suppliers to resort to timbers cut in naturally grown forests. Fourth, the proposed strategy would support the revitalization of the wood processing industry by expanding available commercial trees as well as liberalizing the entry of firms and moving the responsibility of regulating the wood processing industry to the Department of Trade and Industry. DENR control of the number of wood processing permits is misguided. It is based on the outdated idea that the number of firms allowed in an industry should be limited by the supply of locally available raw materials despite their availability in the international market. This view is akin to saying that the number of bakeries in the Philippines should be limited to the supply of locally produced wheat. Clearly, such policy would be welfare reducing.

Finally, we want to emphasize that coalition building based on informed ideas and enlightened self-interest is an essential ingredient to successful and sustainable development agenda. The proposed strategy would provide a valuable platform for forging a consensus among stakeholders on a strategy for dealing with environmental and economic issues. On this point, an important lesson from the Caraga EO 23 experience is that there was no buy-in from affected stakeholders. This lack of

support and the failure of national government officials to listen to their views are among the causes for the environment protection failure of EO 23 and for its damaging (unintended) social and economic consequences.

## References

- Carandang, A.P. 2008. The forestry sector: Costs of environmental damage and net benefits of forestry interventions. Final report submitted to the World Bank as contribution to the Philippines Country Environmental Analysis, Washington, D.C. <http://siteresources.worldbank.org/INTPHILIPPINES/Resources/WBCEATheForestrySectorCarandang.pdf> (accessed on February 28, 2016).
- Carandang, A.P., L.A. Bugayong, P.C. Dolom, L.N. Garcia, M.B. Villanueva, N.O. Espiritu, and Forestry Development Center, University of the Philippines Los Baños. 2013. Analysis of key drivers of deforestation and forest degradation in the Philippines. Bonn, Germany: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. <https://www.giz.de/en/downloads/giz2013-en-key-drivers-deforestation-forest-degradation-philippines.pdf> (accessed on February 28, 2016).
- Durst, P.B., T.R. Waggener, T. Enters, and T.L. Cheng, Editors. 2001. *Forests out of bounds: Impacts and effectiveness of logging bans in natural forests in Asia-Pacific*. Bangkok, Thailand: Food and Agriculture Organization of the United Nations, Regional Office for Asia and the Pacific. [http://coin.fao.org/coin-static/cms/media/9/13171037773780/2001\\_08\\_high.pdf](http://coin.fao.org/coin-static/cms/media/9/13171037773780/2001_08_high.pdf) (accessed on February 29, 2016).
- Israel, D.C. 2015. Nongovernment reforestation in the Philippines: Review, analysis, and ways forward. PIDS Discussion Paper No. 2015-49. Makati City, Philippines: Philippine Institute for Development Studies.
- Paqueo, V.B. and D. Silfverberg. 2016. A jobs value chain and policy analysis of Caraga's wood industry: Towards a revitalization agenda. Final report submitted to the World Bank-Philippines for its Mindanao Jobs Report.
- Philippine Daily Inquirer*. 2012. EO 23 stops legitimate logging, favors instead illegal logging. July 5. <http://opinion.inquirer.net/32033/eo-23-stops-legitimate-logging-favors-instead-illegal-logging> (accessed on February 29, 2016).
- Senate Economic Planning Office (SEPO). 2013. Natural disasters at a glance. [https://www.senate.gov.ph/publications/AAG%202013-04%20-%20Natural%20Disasters\\_final.pdf](https://www.senate.gov.ph/publications/AAG%202013-04%20-%20Natural%20Disasters_final.pdf) (accessed on March 4, 2016).
- Tejaswi, G. 2007. Manual on deforestation, degradation, and fragmentation using remote sensing and GIS. MAR-SFM Working Paper 5. Rome, Italy: Forestry Department, Food and Agriculture Organization of the United Nations. <http://www.fao.org/forestry/18222-045c26b711a976bb9d0d17386ee8f0e37.pdf> (accessed on February 28, 2016).

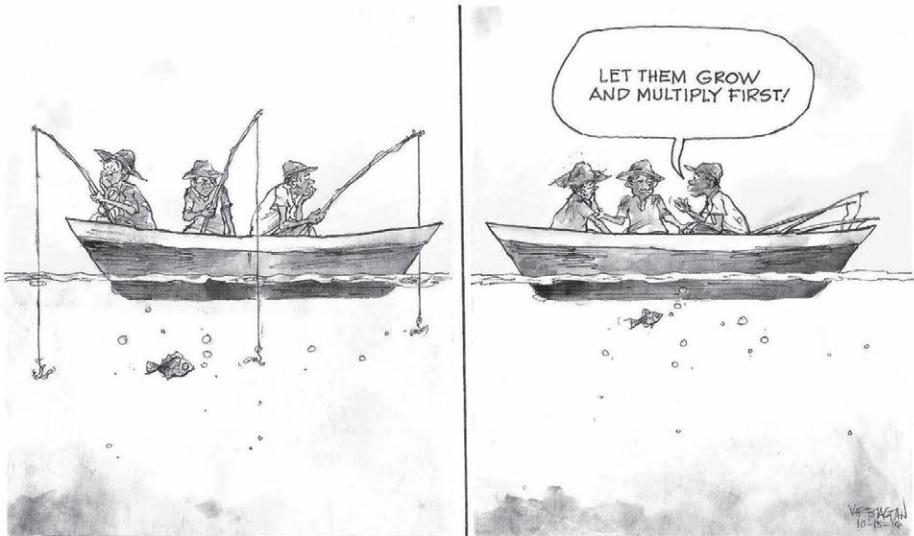
## Chapter 9

# Reducing the Unintended Consequences of Open Access Fishing: Lessons from the Zamboanga Experience

Danilo C. Israel, Milva Lunod-Carinan,  
and Vicente B. Paqueo

### Abstract

The Philippines is blessed with rich marine fishing grounds that are valuable sources of food and livelihood. Unfortunately, they have become increasingly less productive and many are in danger of depletion. At the heart of the problem is the generally open access nature of Philippine fishing grounds, which leads to the unintended consequence of overfishing. Coupled with the





lack of effective control mechanisms, overfishing may profit fishermen in the short run but diminishes the reproductive capacity of the seas and the sustainability of livelihoods and food security in the long term. This paper revisits the issue of overfishing and presents a case study of stakeholders of the sardine industry in Zamboanga who chose to act collectively in ways that effectively minimize overfishing and keep the industry profitable and sustainable for its participants in the long haul.

## Philippine fishing culture and industry

As the sun begins to appear in the horizon, fishing boats begin to carefully approach the shore as the fishermen push and pull to bring the vessel just beyond the break of the water. Once they have secured the boat, fishermen then begin to walk to the shore, dragging behind them the catch of the day. Those who grew up along the shore can recall the days when the raucous chorus of children overpower the waves as they greet the local heroes bringing home the bounties from the sea. These cries perk the ears of the tired fishermen who welcome these small hands that join in dragging the nets to shore. Magnanimous in the extreme, all children are given a share to take home to their mothers. After all, the bounty of the sea is for everyone and so, the fish are free for them.

In the ensuing years, children coming to shore no longer thrilled fishermen. Their enthusiasm was replaced with irritation; any amusement was replaced with scolding. Miserly and suspicious, fishermen now guard their nets against the children's unwanted interference. Was the change simply a natural progression of time?

Over time, the economics of fishing households has transformed some fishing from subsistence to commercial endeavors. Despite this, the economic contribution of the fisheries industry<sup>1</sup> to the Philippine economy has been modest. From 2008 to 2014, the share of fisheries to the gross domestic product was only 1.8 percent on average annually in constant prices. During the same period, fisheries accounted for just 18.2 percent of the gross value added in agriculture, fishery, and forestry on average yearly in constant prices. While the shares of fisheries were small, the value of fisheries exports has consistently exceeded that of imports during the same period. Particularly in 2014, fisheries showed a trade surplus of PHP 41.6 billion indicating

---

<sup>1</sup> The terms "industry" and "sector" are used interchangeably in this paper.

that the industry has been beneficial in terms of earning positive net foreign exchange for the country.

Employment-wise, approximately 70 percent of Filipinos live in coastal areas and many are employed in the fisheries sector. Most of the fisheries employment has been in municipal fisheries, accounting for about 85 percent, while aquaculture and commercial fisheries only provide 14 percent and 1 percent, respectively. This means that fishing is an important supplier of jobs in the country, particularly in the coastal areas. Nutrition-wise, the annual catch in fisheries supplies only 26–27 kilograms (kg) of fish to the national per capita requirement of 36 kg of fish per year. Hence, the catch of the fisheries industry is inadequate to meet the total requirement amounting to an average of 15 percent shortfall or deficit in fish supply (BFAR 2016). This makes exportation necessary.

In terms of population, the fisheries sector is critical to the Philippine economy as coastal areas are more densely populated compared to noncoastal areas. In 2005, the projected population in coastal areas where the fisheries industry is based was 42.9 million, with a population density of 315 persons per square kilometer (BFAR 2016). For 2020, population density in the coastal areas is projected at 405 persons per square kilometer with the population rising to 55.1 million.

In the interests of food security for a rapidly growing population, the Philippine government resorted to the full development of its fisheries industry in the past. Over time, this strategy resulted in serious, albeit unintended, consequence of overfishing.

### **The biology and economy of overfishing**

The existing literature has well chronicled the overfishing problem in the country. In summary, studies have found that as early as the 1960s, except in some areas, the country has reached maximum economic yield (MEY) of its demersal or bottom-dwelling fish stocks (Green et al. 2003). They also found that except in some areas, small pelagic or middle water-dwelling fish species have been overfished with catch per unit effort falling since the 1950s. Using 1998–2001 data, a study estimated that the fish stock in the Philippines has been harvested 30 percent higher than they should be (ICLARM 2001). The same study estimated the economic losses of overfishing at about PHP 6.25 billion or USD 125 million in foregone catch annually.

Studies reveal several reasons why overfishing has been occurring in many parts of the world: first, the open access nature of fishing where fish stocks are freely exploited without much management, regulation, and enforcement; second, due to widespread technological advances, there is an increased capability to fish even in the most isolated places; third, economic development policies of governments tend

to encourage more investment in fishing technology; fourth, the increasing human population requires more fishing to ensure food availability; and lastly, the growing global fish market raises the price of fish and encourages more fishing.

In the Philippines, the lack of management, regulation, and enforcement is the consequence of limited available government resources for implementing regulations. Given the vast Philippine waters, not only is implementation costly, but the absence of government interagency coordination and limited public-private coordination, among other reasons, serve to impede effective management of the fisheries sector.

The basic marine overfishing theory starts with the notion of a fishery resource that is nonexcludable—that is owned by no one and its exploitation is open to everyone.<sup>2</sup> Left in its natural state without human intervention, the stock of fish is assumed to grow consistently over time and is only controlled by the natural fish mortality. When man enters the fishery and starts to prey on the fish, the situation evolves. Initially, at lower fishing effort levels, the fish stock is increasing as fish growth is rising given the still abundant food for the fish to eat and grow on. Afterwards as fishing effort rises, the fish stock declines as growth decreases with less food now for fish to consume. In this relationship, the point at which the level of effort yields the maximum growth in the stock is the maximum sustainable point. Here, the fish catch by man is the biological optimum, the so-called maximum sustainable yield (MSY).

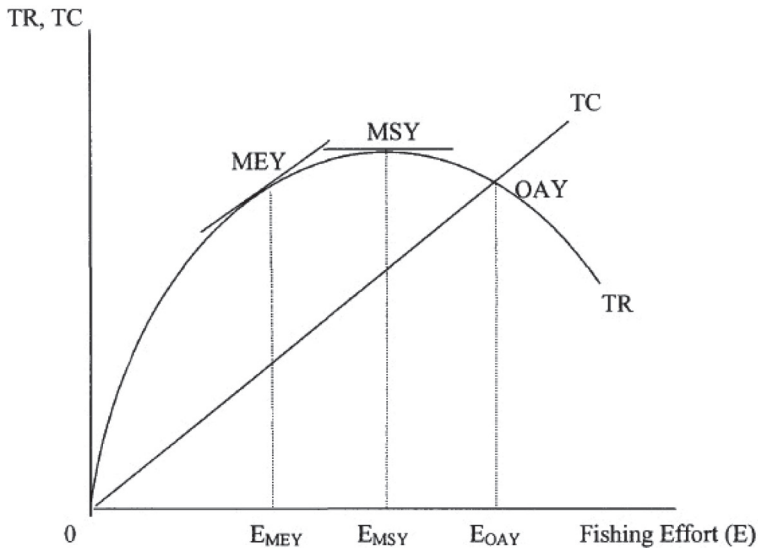
This theory, however, will not be a sufficient basis for marine resource planning and management, where economic concerns are important. Hence, the biological theory has to be transformed into an economic theory. This is facilitated by incorporating prices for fish catch and fishing effort to turn the biological parameters into economic parameters.

In brief, to illustrate the basic economic theory, the total revenue (TR) is first generated by multiplying fish catch by the price of fish per unit of time and the total cost (TC) is derived by multiplying fishing effort by the price of effort per unit of time. If the prices of fish and effort are assumed constant, for simplicity, the resulting TR curve will be an inverted U-shape while the TC curve is a straight line sloping upward (Figure 1). Initially, the economic theory explains that as fishing effort (E) increases, TR also increases but at a decreasing rate. Thus, continued increases in E bring the level of TR first to the economic optimum, MEY. At MEY, the standard economic condition for profit maximization is met. Hence, from the economic standpoint, MEY is the most desirable exploitation level for the fishery.

---

<sup>2</sup> For a more detailed discussion of the theory, see Stavins (2011) and Schatz (1991).

Figure 1. The basic economic theory of overfishing



Source: Modified from Stavins (2011)

If the fisheries industry is efficiently run, fishing should stop at MEY where profits are at maximum. However, with complete open access, fishing continues beyond MEY as more and more fishermen, motivated by the existence of profits, get into the fishery. This situation pushes the level of fishing past the economic optimum into the next optimum, the MSY, which is the biological optimum of the fishery as mentioned earlier. At the MSY level, positive profit still exists as TR remains greater than TC. This profit induces further fishing until, finally, the open access yield (OAY), is reached. At this point, positive profits are gone and, without any incentive to continue fishing, further human predation for profit stops. The OAY is the long-run equilibrium point of the fishery.<sup>3</sup>

Then, we can imagine why fishermen of yesteryears could afford to be more generous with the day's catch than the fishermen of today. After years of intensive fishing, the fish stock had been overexploited and, exacerbated by increasing competition, fishermen could not afford to give away fish for free.

<sup>3</sup> From the aforementioned basic model of overfishing, more complicated models have been developed over time. For a brief review of said models, one may refer to Nguyen (2012).

### **When policies collide: Conservation versus development**

Two laws consolidated, repealed, and modified all past related laws, decrees, executive orders, and other legal issuances pertaining to fisheries: the Philippine Fisheries Code of 1998 (Republic Act or RA 8550) and the Agriculture and Fisheries Modernization Act of 1997 or AFMA (RA 8435). These laws differ in their objectives with the Philippine Fisheries Code, being more resource conservation and management oriented than AFMA, which is more development oriented.

The Fisheries Code contains provisions specifically aimed to address overfishing: Section 7 required the government to issue licenses and permits for the conduct of fishery activities subject to the limits of the MSY of the resource and based on best available evidence; Sections 8 and 9 both stipulated that the government can declare closed seasons and catch ceilings for conservation and ecological purposes based on available evidence; Section 95 declared that it is unlawful to fish in overfished area and during closed season.<sup>4</sup>

To implement the Fisheries Code, the *Comprehensive National Fisheries Industry Development Plan* (CNFIDP) was released and adopted in 2006. This plan provided strategic directions and priority projects for fisheries from 2006 to 2025. It addresses the main challenge of unsustainable management of fisheries, which causes the depletion of fishery resources, degradation of fishery habitats, and intensified resource use competition leading to conflict. Its solution to overfishing is the rationalized utilization of fisheries resources and harvesting within sustainable levels with the core thrust of limiting entry through appropriate licensing schemes.<sup>5</sup>

In 2011, the *Philippine Development Plan* (PDP) recognized that productivity of municipal fisheries has been declining due partly to overfishing and poor enforcement of fishery laws, although it did not specify any strategy or program to address the problem. The PDP's major program focused on the improvement of climate change

<sup>4</sup> RA 8550: "Section 7. Access to Fishery Resources. - The Department shall issue such number of licenses and permits for the conduct of fishery activities subject to the limits of the MSY of the resource as determined by scientific studies or best available evidence. Preference shall be given to resource users in the local communities adjacent or nearest to the municipal waters."

"Section 8. Catch Ceiling Limitations. - The Secretary may prescribe limitations or quota on the total quantity of fish captured, for a specified period of time and specified area based on the best available evidence."

"Section 9. Establishment of Closed Season. - The Secretary may declare, through public notice in at least two (2) newspapers of general circulation or in public service announcements, whichever is applicable, at least five (5) days before the declaration, a closed season in any or all Philippine waters outside the boundary of municipal waters and in bays, for conservation and ecological purposes."

"Section 95. Fishing in Overfished Area and During Closed Season. - It shall be unlawful to fish in overfished area and during closed season."

<sup>5</sup> However, since its commencement up to the present, the CNFIDP was only partially implemented (BFAR 2016).

resilience through the restoration of fishing grounds, stocks and habitats, investment in sustainable, climate change-responsive fishing technologies and products,<sup>6</sup> but indirectly, this can also address problems of overfishing.

In 2015, RA 10654 amended the Philippine Fisheries Code of 1998 to enhance law implementation.<sup>7</sup> It includes an important provision to significantly raise the penalties for commercial fishing violators, poachers, and other fisheries offenders. The amendment also included the creation of an Adjudication Committee under the Bureau of Fisheries and Aquatic Resources (BFAR), which would speed up the determination of liability of violators and imposition of penalties.

A year later, CNFIDP 2016–2026 was drafted to serve as the successor plan of the CNFIDP 2006. The new plan specifically limits the annual growth of municipal capture fisheries to 1 percent with consideration of proper management interventions. These modest targets acknowledge the importance of habitat preservation among other objectives. Furthermore, a 5-percent annual growth in commercial capture fisheries is projected where growth is programmed to come from exploitation of new fishing grounds or conditioned on positive results of management interventions including closed seasons.

Several studies in the past decades that reviewed fisheries programs and projects in the Philippines concluded that, in general, fisheries programs and projects are either integrated or ecosystem based with multiple objectives. In these programs and projects, overfishing was only one of the objectives and, consequently, the impacts of these efforts in terms of specifically addressing overfishing have been difficult to isolate, measure, and determine with certainty.

BFAR (2016) explained that some management interventions in important fishing grounds have actually helped reduce overfishing and the regeneration of fish stocks in some areas. Furthermore, when a closed season was declared in the waters off Zamboanga Peninsula in 2011, reports indicated an increase of landed catch by fishermen of up to 30 percent. In 2012, a fishing ban was also imposed in the Visayan Seas that afterwards showed an increase in landed catch and fish biomass of up to 80 percent. Lastly, in 2013, a fishing ban was implemented in the Davao Gulf, and preliminary data indicated observed increases in sizes of certain landed fishes such as small tunas (*tulingan*) and moonfishes (*chabeta*).

---

<sup>6</sup> Chapter 4, Strategy 2.1a of the 2011–2016 Philippine Development Plan, National Economic and Development Authority

<sup>7</sup> It has been reported that the Philippine government amended the Fisheries Code largely because of the yellow card warning slapped by the European Union in June 2014 over alleged insufficient action to curb illegal fishing (Valencia 2015).

It was not clear from these preliminary reports and initial data how much of the improvements in catch were actually due to the imposed fisheries regulations or otherwise. At best, these efforts may have been only partially effective with the continued existence of overfishing in the country and more needs to be done to confront the problem.

In retrospect, despite the existence of these development and conservation policies, the overfishing problem still persists. Although some studies reported preliminary successes, overfishing continues to affect 75 percent of the country's fishing grounds. Scientific studies<sup>8</sup> also reported that a number of species of fish are already slowly disappearing because of overfishing, illegal fishing, and other factors in Philippine waters. Clearly, there is a strong impetus to rethink the strategy before we reach the total depletion of our marine resources.

Regardless, there exists at least one documented example where improved participation and collective action of all stakeholders have helped develop a more effective enforcement and coordination mechanism necessary to minimize overfishing. This is the case of the sardine industry in the Zamboanga Peninsula (Region IX) and Zamboanga City.

### **Sardine industry in Zamboanga Peninsula**

Sardine, domestically known as *tamban*, is one of the commercially important fish species in the Philippines. It is even more important in Southern Philippines where 72 percent of the total sardine landings in the country are caught and landed (PSA 2014). The Zamboanga Peninsula contributes about 58 percent of the national sardine harvest, and, of the total landed catch in the region, close to 84 percent are landed in Zamboanga City, making it the sardine capital of the country. Thereafter, about 80 percent of the total catch in the Zamboanga Peninsula are supplied to canned and bottled sardines processors while the remaining 20 percent are supplied to the wet market and dried fish sectors (Narvaez and Gangan 2014).

Most sardine fishing fleets and canning factories are located in Zamboanga City due to its proximity to the rich fishing grounds of the Sulu Sea.<sup>9</sup> The city supplies up

---

<sup>8</sup> The first study was conducted by Haribon Foundation for the Conservation of Natural Resources, Inc. in collaboration with Newcastle University in the United Kingdom. There is a soon-to-be released paper by Dr. Margarita Lavides, Prof. Nicholas Polunin, Erina Pauline Molina, Gregorio de la Rosa Jr., Dr. Aileen Mill, Prof. Steven Rushton, and Prof. Selina Stead.

<sup>9</sup> According to 2015 data from BFAR Region IX, a total of 26 registered commercial fishing companies operating 87 sardine purse seine fleets and 569 boats of different classifications and fishing in Zamboanga and Sulu waters are based in Zamboanga City. The city is also home to 11 canned sardine corporations operating 12 manufacturing plants, 4 tin can manufacturers, and 4 ship construction repair companies.

to 90 percent of the country's canned sardine requirements and the canned sardines sector contributes at least USD 16 million in annual export earnings.

In terms of employment contribution, the sardine industry in the Zamboanga Peninsula employs approximately 30,000–35,000 workers per year, excluding those in the allied industries. The industry also provides additional jobs in the region through ancillary industries such as ship repair, shipping, stevedoring, forwarders, transport operators, cold storage, and dried tamban producers, among others. Simply put, the sardine industry's socioeconomic contribution to Zamboanga City, the Zamboanga Peninsula, Mindanao, and the country cannot be understated.

### **The closed season strategy**

To help address the overfishing problem, in 2010, the government and sardines producers in Zamboanga Peninsula agreed to close the sardine fishing area to commercial fishing<sup>10</sup> during the spawning season in order to allow the stocks to recover.

Consequently, by virtue of Joint Administrative Order (JAO) No. 1 of the Department of Agriculture and the Department of the Interior and Local Government, a three-month closed season for the conservation of sardines in East Sulu Sea, Basilan Strait, and Sibugay Bay covering an area of approximately 22,260 square kilometers, was implemented starting December 2011 to March 2012 (Figure 2).<sup>11</sup>

One of the developments that hastened the implementation of the closed season was the decision of the commercial sardine fishing operators, represented by the Southern Philippines Deep Sea Fishing Association (SOPHIL), to go into voluntary closed season themselves even if the government does not decide to impose one.

The three-month seasonal ban (from November to January) is also a recommendation from the Sulu-Celebes Sea-Sustainable Fisheries Management Project, which is the first regional collaborative project of the Sulu-Sulawesi Marine Ecoregion. In addition, other studies<sup>12</sup> revealed that in order to replenish the sardine stock, spawners and their eggs needed to be protected during the peak months for spawning from November to January. The closed season specifically prohibits commercial fishing of sardines in the said area to allow mature sardines to reproduce and their young to grow. The penalties for violators are either imprisonment of six

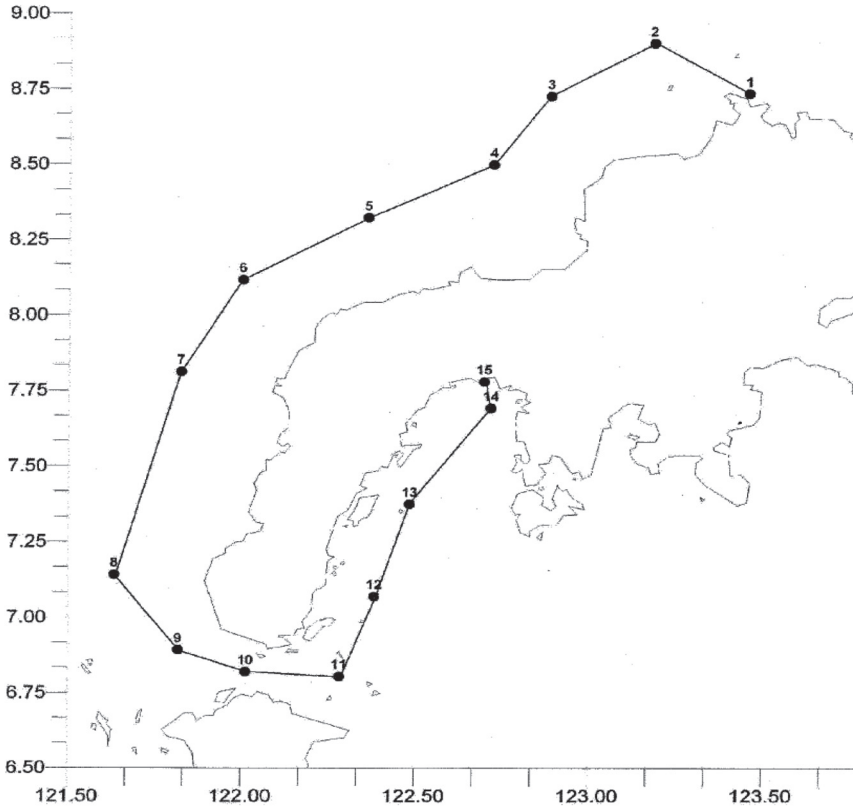
<sup>10</sup> Municipal fishing was not covered by the ban so as not to deprive them of their livelihood. Besides, municipal catch of sardines was considered marginal compared to commercial catch.

<sup>11</sup> The JAO was supposed to take effect from November 1, 2011 to February 1, 2012 and every year thereafter for three years, but a win-win compromise with the sardine industry stakeholders moved the implementation to December 1, 2011 to March 1, 2014 (De Guzman 2014).

<sup>12</sup> An important study that served as basis was the BFAR-National Fisheries Research and Development Institute (NFRDI) Regional Assessment of Small Pelagic Fisheries in Region IX.



Figure 2. Area covered by the closed season for commercial sardine operation in the Zamboanga Peninsula



Source: De Guzman (2014)

months and one day to six years or fine of PHP 6,000 and forfeiture of the catch, with administrative penalty of cancelation of fishing boat and gear license.

**Suffering marginal gains for sustainable gains**

Although many in the private sector supported the closed season, its imposition was initially met with skepticism by others before its implementation. Protesters from both the fisherfolk sector and the canning industries went in troops to oppose the closed season.

On its second year, however, 100-percent compliance was observed from the stakeholders due to the positive results yield in the previous year. Data from the Bureau of Agricultural Statistics showed a significant increase of captured sardines in the Zamboanga region with a total of 156,153 metric tons in 2012 compared to 2011's 146,835 metric tons. The highly favorable rate of compliance to the fishing ban among the private sector can also be attributed to strict law enforcement undertaken by BFAR and other relevant government agencies.

Eventually, acceptance of the seasonal ban became compulsory as the sardine industry itself recommended for its continued implementation in 2014. JAO 1 became BFAR Administrative Circular 255<sup>13</sup> after it was deliberated and approved by the National Fisheries Aquatic Resources Management Council (NFARMC). The control of the seasonal ban became an interagency effort and even included activities to conduct research and peer review of the closed season and provide recommendations to the BFAR director and the NFARMC for purposes of policy adjustments.<sup>14</sup> Practically all of the stakeholders in the sardine industry are represented.

Among the significant outcomes of the closed season are as follows: 1) increased sardine production in general during the years it was implemented; 2) increased number and sizes of spawners and sardine eggs; 3) increased catches of high-priced fish species like *talakitok* (*Caranx sp.*) and tuna in Zamboanga del Norte and in Labuan, Zamboanga City; and 4) spillover effects of increased sardine catches in Tawi-Tawi, Panguil Bay, Palawan, and Davao (De Guzman 2014; BFAR 2016).

The successful implementation of the closed season in the Zamboanga Peninsula inspired other local government units (LGUs) to follow suit. For instance, a similar three-month closed season strategy for sardines, herrings, and mackerels was implemented in the Visayan Sea starting 2012. Davao Gulf followed suit in 2013 when it declared a closed season for small pelagic species every June to August annually. Palawan implemented its three-month closed fishing season for *galunggong* fishery

<sup>13</sup> Section 2 prohibits “any person, association, or corporation to kill or catch, or cause to be killed or caught or taken, any sardines as defined in section 1(a) in the conservation area using purse seine, ringnet, bagnet and scoopnet, or to purchase, sell, offer or expose for sale, or have in possession or under his control any sardines caught in the conservation area, during the closed season from December 1, 2014 to March 1, 2015 and every such period thereafter subject to the annual review by the NFARMC.”

<sup>14</sup> Being a multistakeholder forum, the Technical Working Group is composed of representatives from the provincial fishing industries of Zamboanga del Norte, Zamboanga del Sur, Zamboanga Sibugay, and the Autonomous Region in Muslim Mindanao (ARMM); canning industry; bottled sardines industry; village type processors; academe; Department of Science and Technology; Department of Trade and Industry; Department of Labor and Employment; Philippine National Police–Maritime Group; Philippine Coast Guard; local government units of Zamboanga Peninsula and ARMM; BFAR–Central Office; BFAR–NFRDI; BFAR IX; BFAR–ARMM; Industrial Group of Zamboanga; and labor sector.

starting November 2015 while fishing bans were implemented in Cebu and Iloilo (Espejo 2015).

The closed season would seem to make sense on several fronts. Key industry analysts noted that, while 2011 was the worst year, there was an improvement and recovery in catch in 2013. By 2014, they observed that catch is abundant at the start of the fishing season (March), but the fish are relatively smaller in size compared to what the canneries require. By 2015, local canneries no longer resort to importing raw sardines to augment supply with experts citing this year as the industry's best performance yet. It is worth considering the introduction of some restrictions to fishing activities to develop sustainable practices within the industry for better long-term productivity, in the way that farms need to undergo a fallow period to have a better cropping next season.

In another sense, the closed season encouraged true participation and cooperation among the stakeholders of the industry, which greatly contributed to the success of the season in Zamboanga. The high compliance rate among commercial sardine fishers was brought about by the fact that SOPHIL was among those who strongly and voluntarily pushed it even before implementation and the realization of the sardine stakeholders after the first year that the closed season works. The participation of both public and private stakeholders in the Technical Working Group has also enhanced the participation and involvement of all, not only in the conduct of research and peer review but also, perhaps more importantly, in the policymaking and adjustment processes.

In addition, while BFAR deploys its patrol boats to do monitoring and surveillance in the conservation area, composite teams of personnel from the Philippine National Police-Maritime Unit IX, Naval Forces Western Mindanao, and Philippine Coast Guard IX also assist BFAR in patrolling the area. It can be said that the monitoring and surveillance function has been enforced with the private sector policing their own ranks as well.

### **Policy challenges and room for improvement**

From a long-term ecological point of view, the imposition of closed season allows for the recovery of the fishery resource as the fish ban protects the sardine spawners and allows the little ones to grow. In assessing the well-being of humans from the ecosystem approach to fisheries management, there are still some critical challenges that need to be considered.

The first challenge is the loss of jobs among commercial fishermen, cannery workers, and tin can manufacturers during the three-month duration of the closed

season. The commercial fishing sector makes use of the closed season as the time for ship repair while retaining only 5 percent of their workforce. For their part, canning plants reduce capacity or stop operations during the closed season. Only about 10 percent of cannery workers are retained to do maintenance work and accomplish year-end reports. The rest, who go home to their respective provinces, are jobless for three months. The other half are coming from the nearby provinces of the Zamboanga Peninsula. The same fate happens to the workers of tin can manufacturers as operations are reduced, minimal stocking is practiced.

Some of the aforementioned laid-off workers and their families returned to their homes during closed season. About half of them have homes located outside Zamboanga City which makes the relocation costly. These workers have to find their new source of living either in their hometowns or in cities, otherwise they stay idle and hard up during the entire closed season. Those who found a new job in other places, however, usually no longer go back to their old jobs in the sardine industry creating shortage of workers during the opening of operation that the industry direly needs to fill.

To help address the problem of unemployment during the closed season, the Department of Labor and Employment (DOLE) is implementing the DOLE Integrated Livelihood and Emergency Employment Programs, which has the goal to generate jobs and reduce poverty through transitional emergency employment and promotion of entrepreneurship and community enterprises (Business Diary 2016). On the other hand, BFAR is assisting fisherfolks with their fishing gears and paraphernalia, distribution of different farm inputs such as seaweed seedlings and fingerlings, establishment of postharvest facilities, and the availability of trainings and technical assistance for fishers. The effectiveness of these programs for alleviating the problem of unemployment, however, needs to be assessed in the case of sardine industry workers in Zamboanga. The fact that the unemployment problem remains at present indicates that these programs are only partially successful at best.

The second potential problem that may be related to the closed season is that the prices of sardines in the local markets might significantly increase during the three-month ban. In this case, the poor would suffer because sardine is a cheap source of protein. It was noted that, when the ban was first implemented in 2011, some sardine manufacturing companies have raised their prices before the early closing of fishing season. It was not known, however, if the price increase was due to sardine scarcity or simply the profit-maximizing objectives of sardine companies. At any rate, although the evidence on this issue of rising sardine prices are anecdotal, it is potentially critical because sardine is important when ensuring the protein needs and food security of the poor population.

Third, while there are observable benefits in terms of increased sardine productivity due to the closed season, there are also real costs in terms of lost employment not only within the industry itself but also in its backward and forward linkage industries, as well as increases in sardine price that need to be studied. Alternative livelihood projects could be timed or implemented during the closed season and the government could encourage further participation to share the costs of administering the ban with the private sector.

## **No more free fish and other reflections**

Overfishing and abuse of marine resources due to regulatory failures in fisheries management continue to threaten the productivity, if not depletion, of the country's fishing grounds. The collective action to implement a closed season in Zamboanga was an effective way to address those regulatory failures. The beauty of this strategy revolved around the private sector stakeholders' collective actions in partnership with national and local governments.

Following lessons from Zamboanga, such strategy should be based on stakeholders' appreciation of marine science and their recognition that minimizing the unintended consequences of open access is ultimately for their benefit. While the role of national government and LGUs remains essential, part of their responsibility includes grounding facts and solutions more widely and strongly on the self-interest of their citizens and economic enterprises. In particular, they need to promote a strategy that stimulates collective action on top of reform measures that would enable more effective coordination and enforcement of regulations among the national government agencies, LGUs, and private stakeholders.

Finally, on the issue of unemployment caused by the closed season, one option that can be considered is to impose a tax on the sardine harvest, the proceeds of which can then be used in the development of employment programs for displaced fishermen and other industry workers. The appropriate tax to be imposed needs a separate study, but this should be at a level that is equitable and does not discourage the efficient functioning of the industry.

Over the long term, the use of the system of individually transferable quotas (ITQs) should also be studied seriously and considered for application. The government sets the overall annual allowable catch, equal to the efficient catch, for the fishery, and allocates this catch to fishermen in the form of quotas that entitle holders to catch a specified quantity of fish per year. This allows the fishermen to buy and sell the

quotas. The ITQ system has been shown to work in other countries and could work as well in the Philippine sardine industry.

While local culture along coastal areas changed, and children would no longer receive free fish in the afternoons, the transformation is not necessarily a negative thing. Responsible resource management entails a far more important benefit than one's daily fish, since sustainable management of fish stock ensures food security for our nation's tomorrow. In summary, the main challenge of our modern fishing industry is to expand the popular parable into the following: "Give man a fish and you feed him for a day; teach him how to fish and you feed him for a lifetime; teach fishermen to fish responsibly and you can still feed future generations."

## References

- Bureau of Fisheries and Aquatic Resources (BFAR). 2016. *Comprehensive National Fisheries Industry Development Plan 2016–2025, Medium Term Update 2016–2020*. Quezon City, Philippines: BFAR.
- Business Diary. 2016. Saving the country's cheapest source of protein: Tamban. February 7. <http://businessdiary.com.ph/12837/saving-the-countrys-cheapest-source-of-protein-tamban/> (accessed on April 4, 2016).
- De Guzman, R. 2014. The Joint DA-DILG Administrative Order No. 1: A fishery management measure for the sardine fishery in Zamboanga Peninsula. A presentation material during Orientation Series to Fisherfolks on Closed Season and Alternative Livelihood Assistance, Zamboanga City.
- Espejo, E. 2015. More cities in Mindanao adapt fishing ban. *The Brunei Times*. June 25. <http://www.bt.com.bn/news-asia/2015/06/25/more-cities-mindanao-adapt-fishing-ban> (accessed on April 5, 2015).
- Green, S.J., A.T. White, J.O. Flores, M.F. Carreon III, and A.E. Sia. 2003. *Philippine fisheries in crisis: A framework for management*. Cebu City, Philippines: Coastal Resource Management Project of the Department of Environment and Natural Resources. [http://www.oneocean.org/download/db\\_files/philippine\\_fisheries\\_in\\_crisis.pdf](http://www.oneocean.org/download/db_files/philippine_fisheries_in_crisis.pdf) (accessed on March 7, 2016).
- International Center for Living Aquatic Resources Management (ICLARM). 2001. Sustainable management of coastal fish stocks in Asia. Project final report (March 1998 to March 2001) ADB-RETA 5766. Penang, Malaysia: ICLARM, Worldfish Center.
- Narvaez, T. and A. Gangan. 2014. Supply chain improvement of sardines in selected regions in the Philippines (Zamboanga Peninsula). Laguna, Philippines: Philippine Center for Agriculture, Aquatic and Natural Resources Research and Development, Department of Science and Technology.
- Nguyen, T.V. 2012. Ecosystem-based fishery management: A review of concepts and ecological economic models. *Journal of Ecosystems and Management* 13(2):1–14. <http://jem.forrex.org/index.php/jem/article/viewFile/142/460> (accessed on May 1, 2016).

- Philippine Statistics Authority (PSA). 2014. Online statistical database and country statistics. Quezon City, Philippines: PSA.
- Republic Act No. 8550. An act providing for the development, management, and conservation of the fisheries and aquatic resources, integrating all laws pertinent thereto, and for other purposes. Manila, Philippines: Congress of the Philippines.
- Schatz, R. 1991. Economic rent study for the Philippine fisheries sector program. Final report. Makati City, Philippines.
- Stavins, R. N. 2011. The problem of the commons: Still unsettled after 100 years. *American Economic Review* 101(1):81–108. <http://www.aeaweb.org/articles.php?doi=10.1257/aer.101.1.81> (accessed on April 29, 2016).
- Valencia, C. 2015. Amended Fisheries Code takes effect this week. *The Philippine Star*. March 28. <http://www.philstar.com/business/2015/03/28/1438198/amended-fisheries-code-takes-effect-week> (accessed on March 9, 2016).

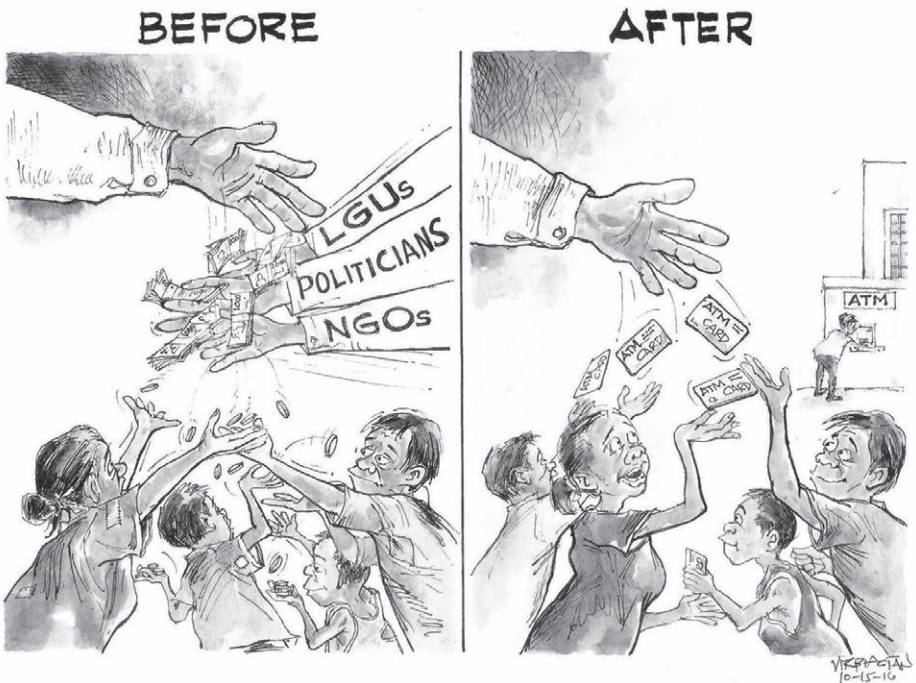
## Chapter 10

# *Pantawid Pamilyang Pilipino* Program: Boon or Bane?

Aniceto C. Orbeta Jr. and Vicente B. Paqueo

### Abstract

The *Pantawid Pamilyang Pilipino* Program has been much maligned and dismissed as a “dole out” program. Critics have focused on the fact that it provides cash grants directly to poor families, believing it would promote the culture of mendicancy and dependence. Others believe that the grants would just be wasted on vices (perhaps alcohol, cigarettes, even drugs)





instead of human capital formation (education and health of the children). Stereotyping the poor prevented society from providing meaningful support in the past by refusing to understand their situation. It turns out that both of these have been proven unfounded by rigorous program evaluations, showed no impact on work effort of beneficiaries nor on expenditure on vice goods. In addition, data show that the poor do respond correctly to incentives that highlight the importance of investing in the human capital of their children, even if returns from such investments are farther away than what usually is their immediate concern. Given the evidence, should we not let Pantawid Pamilya provide us a more nuanced view about the poor that is empirically based so that we can be more effective in assisting them?

## Introduction

What about the poor? This is the question looming in the minds of many ordinary Filipinos when presented with facts about the Philippines' feat as one of the fastest growing economies in the world. The idea that the country is becoming richer while the poor remains poor, if not poorer, is unfathomable to many. This is a valid concern as millions of Filipinos are prevented from living healthy and dignified lives due to poverty. The reality is, the poor suffer from many things: hunger, malnutrition, untreated illnesses, and premature deaths. More so, they suffer from lack of education and competencies needed to earn decent incomes. Worse, those economic disadvantages are likely to be transferred from parents to children.

No doubt, the poor need help. Ironically, when the government extended help in the form of conditional cash transfer (CCT) or locally known as *Pantawid Pamilyang Pilipino Program* (4Ps or *Pantawid*), critics called out the government. Some, those from the militant left and their allies, even openly opposed the program by condemning the government of creating a culture of dependency.

Despite this opposition, *Pantawid* has become a highly popular program. According to a 2015 Social Weather Stations (SWS) survey, four out of five Filipinos (beneficiaries and nonbeneficiaries alike) now support the *Pantawid* program (Antonio 2016). The survey even reports that those who support the program would "probably vote for" a presidential candidate who will continue it. In addition, *Pantawid* has evolved into a well-regarded program with international development partners like the World Bank and the Asian Development Bank considering *Pantawid* as one of the best CCT

programs in the world (Schelzig 2015; WB 2015). But popularity does not necessarily mean that the program has a lasting impact on the welfare of the poor.

For decades, government programs that were supposed to help the poor, especially those in far-flung areas, failed to reach them. If they did, the programs were often ineffective or inadequate. As they became hopeless and disaffected with the government, many were driven to participate in political destabilization, armed rebellion, and other forms of violence. Arguably, such participation was motivated by a desire to bring about a brighter future for their children, if not for their own selves.

Wanting a better approach to social assistance, the administration of President Gloria Macapagal-Arroyo developed the 4Ps, which was tried as a pilot project in a few locations in 2008. Recognizing its potential, President Benigno Aquino III started a massive expansion of the program in 2010, along with a series of measures strengthening its governance and management.

CCT has been effective in Latin America, but not everyone agrees about the effectiveness of Pantawid in the Philippines. The militant left, their political allies, and some influential members of the traditional elite have been unrelenting in their opposition against Pantawid. For various reasons (discussed below), they have been calling for its abolition or de-funding.

But really, how helpful actually is Pantawid program to the poor—and to the country as a whole? How solid are the critic's arguments and evidence for their clamor to de-fund or abolish Pantawid due to its alleged weaknesses and detrimental unintended consequences? What lessons can the new government learn from the experience of Pantawid? By laying out the core ideas of Pantawid while giving due consideration to the critics' arguments against the program, we examine the available evidence and analyze the implication. If the goal is to advance social protection alongside economic reforms, we ask: Is Pantawid useful or wasteful?

## Poverty and the challenge of social protection

The Philippines needs to reduce its poverty rate more rapidly and more deeply than what has been achieved so far. The reduction, as widely agreed, is best done through transformative changes in the economy to ensure sustainability.

Achieving those transformational changes to achieve the desired objective has not been easy. Despite economic reforms that had been taken after Marcos dictatorship, the Philippines continues to struggle in bringing about needed reforms. It will take

many more years of struggle to successfully push additional reforms and for these to bear fruit. Entrenched political and ideological forces against needed reforms are quite difficult impediments to overcome.

Such difficulty in overcoming poverty is evident in the number of poor since 1991 (Figure 1). The Philippine government defines a household as poor, if its income is less than the poverty line—the amount it needs to buy food and necessities for its subsistence. Even after decades of political promises and economic planning, the rate of poverty incidence among Filipino households has remained persistently high at 21.6 percent in 2015. In fact, the total number of poor people slowly declined from 22.6 million in 2006 to 21.9 million in 2015.<sup>1</sup> More disconcerting, the incidence rate of poverty remains stubbornly high<sup>2</sup> even after five years of relatively high gross domestic product (GDP) growth under *Daang Matuwid*.

Given the above information, we can say that the Philippines is consistent in two things: first, positive economic growth and second, and rather sadly, high number of poor people. It would be a cruel policy not to immediately improve the country's social assistance, when it can, to prevent the worst consequences of poverty. Indeed, there is an immediate need for a robust social assistance program. The same program should also raise poor people's chances of eventually moving out from poverty in the long run, so that poor children will have a chance for a better future. Clearly, inaction from the part of government would be unwise and could forego great economic payoffs.

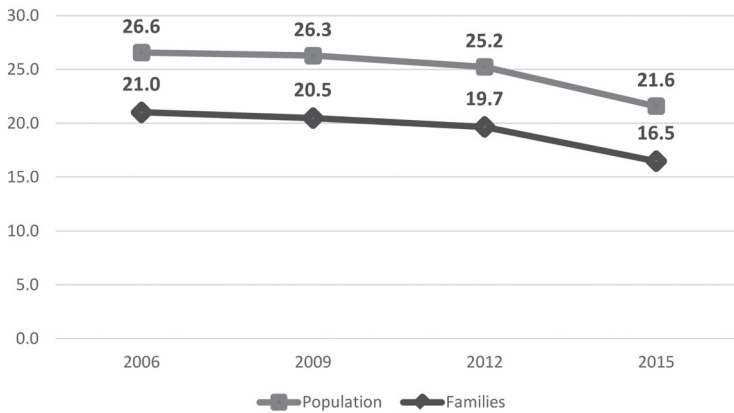
That there are significant economic returns to effectively reducing the worst consequences of poverty can be inferred from available research findings. Ample research would show that investments in early life have long-lasting effects. Childhood health has great influence on health and economic status through life (Case and Paxson 2010). Many of the interventions, such as immunization, are effective only if administered at the right period (before age 1). Similarly, education at early age greatly influences educational attainment, probability of employment, and earnings in adulthood (Almond and Currie 2011). Children in disadvantaged environments are also more likely to commit crime, have out-of-wedlock births, and drop out of school (Heckman and Masterov 2007).

---

<sup>1</sup> The slow decline in total number of poor people from 2006 to 2015 was attributed to rapid population growth and slow decline in the poverty rate.

<sup>2</sup> This, however, declined by 5.0 percent only for the years 2009–2015 .

Figure 1. Philippine poverty incidence, 2006–2015 (in %)



Source: Philippine Statistics Authority (PSA), 2016

## The objective and strategy of Pantawid

Recognizing the importance of providing immediate help to the poor, the government adopted an innovative social assistance program targeted at eligible poor households. The objective is to immediately ease poor families' pain of deprivation and simultaneously enable and motivate them to raise the education, health, and nutrition status of their children. With increased human capital, these children would have a better chance of escaping poverty in the long run.

### Co-responsibility and social contract approach

With this objective in mind, the government designed Pantawid to assist the poor by providing them CCTs. Unlike conventional social assistance, these grants are provided in exchange for certain actions (called “conditionalities”) that beneficiaries must comply with.

The implication of conditioning the grants on certain household actions means that beneficiaries must pay a certain price to continue receiving Pantawid grants. The price comes in the form of household time, money, and effort spent in ensuring that children are present in school and that they get basic health care. The cost of educating children includes expenses for transportation, uniforms, school fees, and

educational materials as well as the opportunity cost of the time children and parents spent in meeting the conditions of the grants.

CCTs usually link those conditions to specific behavior, output, or outcome that the government wants to change. In the Philippines, they are linked to education, health, and nutrition indicators because they have been lagging behind the Millennium Development Goals. Specifically, the Pantawid condition on school grants includes children's school enrollment and class attendance rate of at least 85 percent. For health grants, the conditions are regular health clinic visits for immunization, growth monitoring, and other basic health services. Interestingly, the Pantawid also requires parents to attend Family Development sessions. In these sessions, beneficiaries discuss and learn about family planning, development of good family relationships, livelihood, good citizenship, health education, financial literacy, children education, and other family issues. See Appendix 1 for details of the Pantawid grants and conditions.

One way of looking at the *quid pro quo* or “exchange deal” requirement of Pantawid is that it is a social contract between the government and the beneficiary household. This contract reflects the belief that the education, health, and nutrition of children are their “co-responsibility”. It is with this philosophy in mind that the government provides through the Pantawid program cash grants to eligible households with young children.

Initially, the program included only children 14 years old or below. After five years of program implementation, eligibility for the education grant was extended up to 18 year olds.<sup>3</sup> Government decided to adopt the extension to help poor children complete high school education. This was deemed as a smart decision in view of the high economic return to secondary education as a study estimates a rate of return of 22.5 percent to secondary education (Paqueo et al. 2013).

The social contract approach to social assistance was inspired by the CCT programs of Mexico (*Oportunidades*), Brazil (*Bolsa Familia*), and Colombia (*Familias en Accion*), pioneers in the development and implementation of large-scale CCT programs. The Philippine emulation of those programs made sense, since the Philippines and the abovementioned Latin American countries have had similar problems with conventional social assistance programs.

In the Philippines, price subsidy and feeding programs are just two examples of social protection programs implemented by the government to help the poor afford basic necessities. However, the National Food Authority rice price subsidy program

---

<sup>3</sup> For a discussion of the rationale for the extension of Pantawid benefits, see Paqueo et al. (2013).

was found to be the least effective program in reaching the poor while encompassing a bulk of national government spending (Manasan 2009). Other programs, such as feeding programs, social security systems, and social health insurance schemes, were also found to be problematic in the country. Numerous feeding programs in the Philippines (e.g., Food-for-School Program, school feeding programs, and 4Ps) overlapped with one another, while the Social Security System, Government Service Insurance System, and PhilHealth provided low coverage of poor households especially in the informal sector (Manasan 2009).

### **Demand-side emphasis**

Until the introduction of CCT, social assistance programs were mostly limited to beefing up the supply of health, nutrition, and education services. What the government did was to improve the supply of these services to help the poor. This was done by allocating more public funds for hiring additional teachers and health personnel, increasing the number of school places and health clinics, and purchasing food stuff for feeding programs.

A common problem with the traditional supply-side approach to social assistance is that the allocated resources often do not translate into actual benefits received by their intended beneficiaries. One reason is that households are too poor to send their children to school or for mothers and their young children to get basic health care. To address this issue, Pantawid seeks to rebalance social assistance toward interventions that would enable and motivate households to keep their children in school and bring them to clinics for basic health and nutrition services. With this program focus, analysts have labeled Pantawid and other CCTs as “demand-side” interventions because their assistance is directed at boosting the households’ demand for improvements in children’s education, health, and nutrition.<sup>4</sup>

Appendix 1 discusses other defining characteristics of Pantawid compared to traditional social assistance programs. These characteristics include targeting and selection of beneficiaries, use of cash instead of in-kind assistance, the institution of good governance and management practices, and modern banking and technology support.

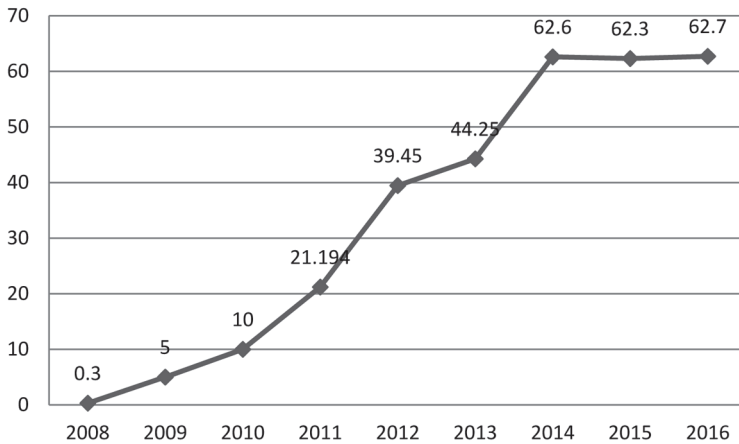
### **Expansion of coverage and costs**

The Pantawid program started with 284,000 beneficiary households in 2008. By 2015, beneficiaries reached 4.1 million households. In terms of population, the number of

---

<sup>4</sup> The use of demand-driven strategies for development is an old idea in economics. Its rationale has been well articulated by Hirschman (1958).

Figure 2. Budget of Pantawid program, 2008–2016



Source: Department of Social Welfare Development (DSWD), various years

beneficiaries rose from 662,000 children in 2008 to 10.2 million in 2015. Today, the program covers about 79 percent of poor households whose income is less than the amount needed for basic necessities.

To support the rapid and massive expansion of beneficiary coverage, the government allocated huge increases in the budget of Pantawid.

The increase in budget allocation (Figure 2) for Pantawid allowed the Philippines to align its social protection spending closer to the practices of its peers. In 2009, social protection spending (the sum of social assistance and social insurance) was only a small 2.3 percent of GDP. By 2013, it stood at 3.4 percent or more, which is closer to the social protection spending of East Asia and the Pacific (3.5%) and of Latin America and the Caribbean (5.1%). So, although there was a large expansion in social protection spending due largely to increased Pantawid expenditure, social protection expenditure remains within international norms.

However, despite advances in social assistance, the *2015 Family Income and Expenditure Survey* shows that there remains a considerable gap between the average household income of the poor and the poverty threshold. The gap is estimated to be PHP 135.6 billion<sup>5</sup> in 2015. This is the amount of transfer needed annually to bring

<sup>5</sup> Based on the 2015 PSA estimates of transfer needed to bring the poor family of five out of poverty at PHP 2,650.7 per month. With the population estimate of 100.981 million, there are about 20.196 households at five members each or 4.261 million poor households.

the income of all poor households to the level of the poverty threshold. Despite large increases in Pantawid budget, therefore, the financial challenge of helping the poor close the gap between their income and the poverty line remains substantial.

## **Skepticism, criticism, and opposition**

Not everybody believes in the social and economic value of investing massive amounts of public resources in Pantawid (Ellao 2010; Luci 2014). Some vocal and influential segments of the population claim that CCT has detrimental unintended consequences. Others are skeptical of the program's effectiveness. This is especially evident during the years immediately following former President Aquino's decision to massively expand the program's budget. The opposition includes militant activists and ideologues, partisan political opponents of the president, and some well-meaning religious leaders. Although the opposition seems to have weakened recently, the militant left and their allies in Congress, as well as some members of the Philippine elite, continue to call for Pantawid's abolition or diminution of its budget.

Palliative, unsustainable, and government dole-out—these are the common criticisms of Pantawid. Critics argue that the program's palliative characteristic does not have long-lasting effects against poverty. Moreover, it has been criticized as unsustainable because the assistance generates neither income nor transformative changes in the structure of the economy. Worse, branding the Pantawid as government dole-out, critics claim that the program leads to a culture of government dependency, mendicancy, and laziness. In their view, the huge amount of resources spent on Pantawid would be better spent on job creation and training that would “teach the poor how to fish”. The next section discusses the evidence of those claims.

Critics also object to the idea of giving cash directly to target poor households and giving them discretion on how best to spend cash assistance. They are concerned that the poor would waste their cash grants on entertainment, gambling, alcohol, and other vices rather than use them on the education and health needs of the children. In short, they doubt that the poor can be trusted to make appropriate expenditure decisions.

Furthermore, they claim that the program benefits will not reach the intended beneficiaries because of alleged leakages due to corruption and failure to accurately target the poor. Critics contend that Pantawid is a failure because a large percentage of beneficiaries are not the intended poor. They claim that Pantawid grants are being used for patronage politics. They specifically alleged that Pantawid was used to buy



votes. This allegation is on top of their skepticism about the technical accuracy of the database, the methodology, and its application.

Skeptics also doubt that Pantawid's demand-side strategy would work. To be effective, they argue that school places and health center services must be available to meet increased demand. Or if they are in short supply, markets and local governments should be able to respond to demand pressures. For those critics, their belief is that demand is not a binding constraint.

Obviously, both demand and supply-side interventions are necessary to achieve optimal levels of education and health service utilization. At the margins, however, which type of interventions is more effective is an empirical question. It depends on whether the binding constraint in a particular situation is the demand for or the supply of needed services.

On this point, it is not obvious that demand is not a binding constraint. Some studies indicate that large segments of the poor have not enrolled in school or have prematurely dropped out of school because they could not afford the monetary and opportunity costs involved. Similarly, some research findings indicate that many poor people have not received preventive and curative care because they could not afford the expenses of going to health centers. Further, on malnutrition, households arguably do not buy enough nutritious food due to both income constraint and lack of health education. Those observations can be interpreted to mean that the education, health, and nutrition of those poor children are effectively demand constraint. **The point here is that the effectiveness of a social assistance program that is focused on demand-side interventions is an empirical question.** The next section discusses the evidence regarding this issue.

Before moving on to the next section, it is necessary to clarify a couple of points. First, no advocate of Pantawid is claiming that it is *panacea* or a substitute for transformative economic reforms. Assertions to the contrary against the program are misleading. Second, it is also disingenuous for militant critics and their allies to call for expansion of jobs instead of Pantawid, while advocating policies and regulations that inadvertently encourage capital-intensive production and make job creation difficult.<sup>6</sup>

---

<sup>6</sup> Some of the critics of Pantawid favor heavy industrialization, directed investments, state-owned enterprises, investment restrictions, and labor regulations that make creation of gainful jobs more difficult.

## The evidence of Pantawid's performance

The basic evidence of Pantawid's performance is given by the two waves of rigorous impact evaluation (DSWD and WB 2012; 2014)—one in 2011 (Wave 1) or two years into the program, and another in 2014 (Wave 2) or five years into the program. The evidence from these two evaluations have shown that the program continues to deliver on its promises like CCT programs in other countries (Fiszbein et al. 2009; IEG 2011). The results of the two evaluations are summarized below. The results of an independent analysis of the impact of Pantawid on conflict is also discussed.

**The Pantawid has kept the children in school.** Wave 1 evaluation found higher proportion of children in preschool and elementary levels while there is no impact on children 12–17 years old. Wave 2 found significantly higher enrollment among older children 12–15 years old but had found no significant impact on elementary school-age children because enrollment rate is already near universal at 98 percent.

An interesting result is found on child labor. The evaluations have shown that **Pantawid has decreased the time spent on paid work for children although it has not significantly decreased the incidence of child labor.** This indicates that while the program has reduced the time spent on paid work for children, the grants are insufficient to significantly decrease the number of children still engage in paid work.

**The program has improved access to essential health services even though its higher level impact is mixed, perhaps because of supply-side issues.** More children were under growth monitoring, received deworming pills, and got vitamin A and iron supplementation. More mothers received antenatal and postnatal care in health facilities staffed by health professionals. Nutrition impact, however, has either mixed or no significant effects.

The evaluations also showed **increased household expenditure on education as well as expenditure on clothing.** There are no impacts on total expenditure and expenditures on food. Another study, though, has shown that there are positive impacts on levels of food expenditures and carbohydrate foods, and for the bottom 20 percent, there are positive impacts on total food expenditures and more specific expenditure items (Tutor 2014). One explanation for these tentative effects in the aggregate expenditures while having significant effects on specific components is that the grants maybe too little to create significant impacts on aggregate expenditures even if it shows significant impact on specific expenditures.

As mentioned, one of the criticisms of Pantawid is that it will fund increased expenditure on **socially undesirable expenditures or vice goods such as alcohol and tobacco and gambling.** The evaluation has found no evidence on this as the

expenditure on these items is not different from their counterparts indicating this fear is clearly unfounded. These results are also confirmed by results from other CCT programs (Evans and Popova 2014).

Another common criticism is that the program will make the beneficiaries dependent on the grants. The strongest evidence on dependency is the lowering of work effort. On this aspect, it has been shown that **adult members of the Pantawid households are as industrious as their non-Pantawid counterparts** as indicated by all aspects of the labor market outcomes from labor force participation, employment, hours of work, and looking for work when unemployed (Orbeta et al. 2013; DSWD and WB 2014). There is even evidence that among those who are currently employed, more Pantawid beneficiaries desire more work compared to their counterparts. Global evidence from different CCT program confirm these results (Banerjee et al. 2015).

Finally, another empirical evidence shows that **Pantawid also decreases conflict incidents** (Crost et al. 2016). The authors argued that Pantawid, which targets households directly and disburses aid directly to beneficiaries' accounts, does not create high profile targets to derail the program compared to, say, infrastructure programs like community-driven development programs.

Overall, the evaluations have shown that **the poor**, like anybody else, are **rational on the use of their money**. They respond to incentives such as giving importance to socially desirable expenditures like education and health promoted by Pantawid which are known to be of little current importance to them because the prospective benefits are too far in the future. Finally, it is also shown that Pantawid reduces the incidence of conflicts in communities.

## Conclusion: Summary, reflections, and caveats

Millions of poor beneficiaries are now receiving cash grants due to former President Aquino III's bold decision to implement a massive expansion of a strengthened Pantawid. On balance, the program has had significant beneficial impact on the poor and their children. Through this program, people have clearly felt and seen the helping hand of the state effectively at work, as evidenced by the overwhelming support of beneficiaries and nonbeneficiaries alike for the continuation of the program. As mentioned, SWS survey<sup>7</sup> shows that four out of five respondents support the program and have expressed their intention to vote for the presidential

---

<sup>7</sup> The survey was conducted prior to the May 2016 election.

candidate who supports its continuation. This finding suggests that **from the societal point of view, the economic benefits from Pantawid must be worth more than the cost of transferring PHP 60 billion of public money to the poor.** This conclusion is consistent with the view held by many that, at the margin, a peso is worth more to the poor than to the nonpoor households.

Indeed, Pantawid Pamilya is a smart, populist program unlike other antipoverty programs. It helps the poor with their urgent needs while creating a more hopeful future for their children. This alternative future is being created by helping the children of the poor develop greater capacity to eventually earn income through increased years of education. The program also paves the way for the children to develop in terms of mental capacity and other physical abilities, qualities associated with good health and nutrition.

The implication of the data presented above is that the program supports interventions that would likely reduce the transmission of poverty from parents to children. **Therefore, the abolition or the scaling down of Pantawid would probably have damaging unintended consequences on the present and future welfare of poor children.** Such policy decision would arguably reduce opportunities for gainful jobs and moving out of poverty when the beneficiaries' children become adults. On this point, the opponents of Pantawid have been disingenuous in denying the value of preparing children for productive employment. Their use of the adage about “teaching people how to fish instead of providing dole-outs” to criticize Pantawid Pamilya is misleading and betrays lack of realism. Undoubtedly, more educated and healthier children due to 4Ps means greater capacity to be productive and trainable when they enter the labor market. To advocate reallocation of Pantawid Pamilya budget to some unknown or unproven job creation programs would be highly damaging to the welfare of the poor with urgent needs.

In relation to the general conclusion above, we highlight the following specific findings.

First, the critics' concern that Pantawid cash grants would only increase expenditures on vices, undermine work ethics, and encourage a culture of mendicancy is overblown. In fact, impact evaluations do not support the critics' allegations, at least within the parameters of the current design of Pantawid and other CCT programs outside the Philippines. In this regard, evidence indicates that poor parents spend their resources responsibly. Mere labeling and denigrating the program's conditional grants as dole-outs that parents would just waste on vices instead of children's human capital formation is not a credible argument.

Second, the critics claim that Pantawid is a failure because its benefits are going to beneficiaries above the poverty line is also a gross exaggeration. In fact, 82 percent of the beneficiaries belong to bottom 40 income class and 53 percent are from the bottom 20 income class. In fact, it was also pointed out that Pantawid is one of the better targeted CCT programs in the world (Albert 2014).

Third, aside from the usual spillover effects of improved education, health, and nutrition,<sup>8</sup> evidence indicates that the Pantawid grants do lead to lessening insurgent influence and fewer violent conflicts.<sup>9</sup> The benefits from reduced conflicts, greater social cohesion, and improved social order can be viewed as public goods. These benefits provide yet another justification for investing public funds in Pantawid.

However, **the generally positive tone of the above summary should not be taken to mean that there is no more room for improvements.** In fact, moving forward, there are important issues that need to be addressed to maintain and enhance the impact of Pantawid on the welfare of the poor. We, therefore, end this paper with some **parting thoughts on three important issues:** the mixed findings regarding the impact of the program on outcome indicators, the desirability of raising the amount of grants provided, and the need to adjust the program conditionalities.

On the **mixed effects of Pantawid**, the impact evaluation section shows that on many output and outcome indicators, the program has had statistically significant impact. On several other indicators, however, the impact of Pantawid appears to be insignificant. Why the program failed to have statistically significant effects on some of the variables is an important question that needs further study. A couple of ideas are proposed for further empirical analysis.

One idea is the possibility that the quantity and quality of supply of education and health services may be the predominant binding constraint instead of the effective demand of households in certain localities. For example, perhaps the reason why Pantawid has not raised the rate of complete immunization of children five years old and below may perhaps be due to lack of vaccines in the health centers when beneficiary children are brought to those facilities for basic health services.

The second idea is that given the relatively small size of the grants, the effects may be too small to be detected, considering sampling and data measurement errors. For example, impact evaluation analysis found that Pantawid has had no significant effect on household income, total consumption expenditure, and current poverty status.

---

<sup>8</sup> Examples of spillover effects due to household failure to get children immunized and educated are faster and wider transmission of certain communicable diseases and lower economic growth due policy distortions arising from public ignorance.

<sup>9</sup> See Crost et al. (2016).

The implication of this explanation, if empirically verified, is that bigger amount of cash grants might be needed for Pantawid to have a larger and more detectable effect on poverty incidence.

On the size of grants, there are proposals to raise their amounts to enhance the impact of Pantawid. There is reason to believe that increased amounts would raise the impact of the program. **But providing all beneficiary households bigger grants without piloting it would be risky.** It would be prudent to first know the impact of different alternative grant sizes to determine the optimal affordable grant amounts. Relatively large grants could trigger unintended consequences on work ethics. A reason for why Pantawid has not undermined the beneficiary households' work ethics so far is that the cash transfers they are currently receiving are not big enough to enable some adult household members to stop working or to reduce hours of work without lowering household welfare. Much bigger grants, however, can change the household calculus in ways that would lead to the weakening of work ethics and the emergence of dependency on government, as critics have warned.

**On the need to update the grant conditions, there is a need to rethink them.**

Given that elementary enrollment rate is already close to 100 percent, it makes little sense to continue conditioning the education grants on elementary school enrollment. On this point, the government needs to think of a different education-related indicator on which to condition the grant transfer. Moreover, the conditions for the health grants should also be rethought, given that all Pantawid households are now covered by PhilHealth. Perhaps, the conditionalities can be adjusted to enable and motivate timely use of PhilHealth benefits by Pantawid beneficiaries. Utilization of PhilHealth benefits by rural households is low, mostly due to the cost of transportation and related expenses for medical checkups. The challenge in this regard is how to ensure that Pantawid beneficiaries are able to opportunely take advantage of their PhilHealth coverage and minimize the effects of ill health.

## Appendix

### Appendix 1. Additional details on the Pantawid Pamilya program design

#### Pantawid grants and conditions

A health grant amounting to PHP 500 is given to each participating household every month. The household also receives a monthly education grant of PHP 300 per child for 10 months each year.<sup>10</sup> In order to receive these cash grants, all the succeeding conditions must be met:<sup>11</sup>

1. Pregnant women must avail of pre- and postnatal care, and be attended during childbirth by a trained professional.
2. Parents or guardians must attend the family development sessions, which include topics on responsible parenting, health, and nutrition.
3. Children aged 0–5 must receive regular preventive health checkups and vaccines.
4. Children aged 6–14 must receive deworming pills twice a year.
5. Children beneficiaries aged 3–18 must enroll in school and maintain an attendance of at least 85 percent of class days every month.

#### Targeting and selection of beneficiaries

In traditional social assistance programs, their benefits are often diverted away from the intended poor beneficiaries. A major cause of this diversion is lack of beneficiary targeting and selection of beneficiaries based on data and transparent rules.

To solve this problem, Pantawid selects beneficiaries from a list of households identified as poor by the National Household Targeting System for Poverty Reduction or NHTS-PR. The list was generated on the basis of specific indicators and statistical procedures. A key methodology in this regard is the use of so-called proxy means tests to calculate and compare household income against the official poverty line. This comparison determines the poverty status of a household.

The introduction and use of the NHTS-PR, which has been institutionalized as *Listahanan* (registry) and put under the responsibility of the Philippine Statistics Authority, is a landmark in the country's antipoverty efforts. Prior to the NHTS-PR, government programs did not have a data-driven system for determining the poverty status of households and identifying their eligibility for program benefits. Without

<sup>10</sup> A household may only register a maximum of three children for the program.

<sup>11</sup> For more information, you may go to <http://www.gov.ph/programs/conditional-cash-transfer/>

such system, the patronage of politicians and other influential personalities tended to become the predominant basis for the selection of beneficiaries in traditional antipoverty programs. In Pantawid, the targeting and selection processes are highly (albeit, not perfectly) protected against patronage politics.

### **Cash versus in-kind assistance**

Until CCT came along, social assistance was generally provided to beneficiaries in the form of specific commodities like food, medicines, and clothing. Often, they were wasted due to spoilage, theft, corruption, “ghost purchases”, and high storage and handling costs. With so many layers of bureaucracy involved, assistance provided by traditional interventions often did not reach their intended beneficiaries. Moreover, they frequently were not responsive to the priority needs and specific circumstances of the poor.

To address those inefficiencies, Pantawid uses cash assistance directly given to parents through inexpensive and well-documented bank transfers. They can spend the money as they see fit in accordance with their specific needs and circumstances. In this way, remote households can use their education grants to pay for the children’s school transportation cost; and those close to schools can use their grants to buy educational materials instead.

### **Governance, accountability, and modern technology**

The inefficiency and failure of traditional social assistance programs in reaching the poor are also due to governance and accountability issues. In addition to its core characteristics discussed above, therefore, the Pantawid Pamilya has adopted good governance and management practices supported by modern technology. As in other CCTs, Pantawid has adopted the principle of transparency, clear rules regarding policies and practices, functional and effective accountability mechanisms, and quick corrective measures based on timely feedback. Toward this end, the government has developed a culture of impact evaluation and monitoring, including independent spot-checking. It also instituted computerized systems to support conditionalities compliance verification, payment of benefits, and complaints and grievance redress mechanisms. Pantawid is stronger than traditional social assistance programs in regard to those aspects of governance and management.



## References

- Albert, J.R.G. 2014. The costs and benefits of Pantawid Pamilya. Thought Leaders. *Rappler.com*. December 3. <http://www.rappler.com/thought-leaders/76723-costs-benefits-pantawid-pamilya> (accessed on March 9, 2016).
- Almond, D. and J. Currie. 2011. Human capital development before age five. In *Handbook of labor economics* Vol. 4B, edited by O. Ashenfelter and D. Card. Princeton, NJ: North Holland.
- Antonio, R.L. 2016. 4 of 5 Filipino will vote for 4Ps bet, says survey. *Philippine Daily Inquirer*. March 6. <http://newsinfo.inquirer.net/771110/4-of-5-filipino-will-vote-for-4ps-bet-says-survey> (accessed on March 9, 2016).
- Banerjee, A., R. Hanna, G. Kreindler, and B.A. Olken. 2015. Debunking the stereotype of the lazy welfare recipient: Evidence from cash transfer programs worldwide. CID Working Paper No. 308. Cambridge, MA: Center for International Development at Harvard University.
- Case, A. and C. Paxson. 2010. Causes and consequences of early-life health. *Demography* 47(1):S65–S85.
- Crost, B., J.H. Felter, and P.B. Johnston. 2016. Conditional cash transfers, civil conflict, and insurgent influence: Experimental evidence from the Philippines. *Journal of Development Economics* 118:171–182.
- Department of Social Welfare and Development (DSWD) and World Bank (WB). 2012. Philippines conditional cash transfer program: Impact evaluation 2012. Revised April 2014. Manila, Philippines and Washington, D.C.: DSWD and WB.
- . 2014. Keeping children healthy and in school: Evaluating the Pantawid Pamilya using regression discontinuity design, second wave impact evaluation results. Manila, Philippines and Washington, D.C.: DSWD and WB.
- Ellao, J.A. 2010. Critics slam ‘conditional cash transfer program’ as unsustainable, corruption-prone. *Bulatlat*. October 23. <http://bulatlat.com/main/2010/10/23/critics-slam-conditional-cash-transfer-program-as-unsustainable-corruption-prone/> (accessed on March 9, 2016).
- Evans, D. and A. Popova. 2014. Cash transfers and temptation goods: A review of global evidence. Policy Research Working Paper 6886. Washington, D.C.: The World Bank.
- Fiszbein, A., N. Schady, F. Ferreira, M. Grosh, N. Kelleher, P. Olinto, and E. Skoufias. 2009. *Conditional cash transfers: Reducing present and future poverty*. Washington, D.C.: The World Bank.
- Heckman, J.J. and D.V. Masterov. 2007. The productivity argument for investing in young children. *Applied Economic Perspectives and Policy* 29(3):446–493.
- Hirschman, A. 1958. *The strategy of economic development*. New Haven, CT: Yale University Press.
- Independent Evaluation Group (IEG). 2011. *Evidence and lessons learned from impact evaluations on social safety nets*. Washington, D.C.: The World Bank.
- Luci, C. 2014. Solons slam ‘anomalous’ 4Ps dole-out to poor. *Manila Bulletin*. August 11. <http://www.mb.com.ph/solons-slam-anomalous-4ps-dole-out-to-poor/> (accessed on March 9, 2016).
- Manasan, R. 2009. Reforming social protection policy: Responding to the global financial crisis and beyond. PIDS Discussion Paper No. 2009-22. Makati City, Philippines: Philippine Institute for Development Studies.

- Orbeta, A. Jr., V. Paqueo, and C Spohr. 2013. Does Pantawid foster dependence or encourage work? Evidence from a randomized experiment. Paper presented at the 12th National Convention on Statistics, October 1–2, Edsa Shangri-la Hotel.
- Paqueo, V., A. Orbeta Jr., T. Castaneda, and C. Spohr. 2013. After five years of Pantawid, what next? PIDS Discussion Paper No. 2013-41. Makati City, Philippines: Philippine Institute for Development Studies.
- Philippine Statistics Authority (PSA). 2016. Poverty incidence among Filipinos registered at 21.6 percent in 2015. Press release. October 27. Quezon City, Philippines: PSA. <https://psa.gov.ph/poverty-press-releases> (accessed on January 22, 2017).
- Schelzig, K. 2015. Pantawid Pamilya: Money for nothing? Asian Development Blog. February 19. <http://blogs.adb.org/blog/pantawid-pamilya-money-nothing> (accessed on May 9, 2016).
- Tutor, M. 2014. The impact of the Philippines' conditional transfer program on consumption. *The Philippine Review of Economics* L1(1):117–161.
- World Bank (WB). 2015. Philippines: CCT proven to keep poor children healthy and in school. Press release. September 23. Washington, D.C.: WB. <http://www.worldbank.org/en/news/press-release/2015/09/23/philippines-cct-proven-to-keep-poor-children-healthy-and-in-school> (accessed on May 9, 2016).



## Chapter 11

# The Irony of RH Law Critics' Opposition to Comprehensive Sex Education

Michael R.M. Abrigo and Vicente B. Paqueo

### Abstract

Sex-related risks, early sexual experience, and unwanted pregnancies are major concerns of Filipinos. These issues have long been battlegrounds for the often rancorous debates about the provisions of the Reproductive



"I SHOULD HAVE KNOWN"

Health (RH) Law. In December 2012, Congress approved a comprehensive RH law that guarantees universal access to services, including age-appropriate health and sexuality education in schools. Critics then raised a public health concern saying that exposing children to reproductive health care, especially mandatory sexuality education, leads to earlier sexual initiation and higher rates of sexual activity among them. Using the 2008 National Demographic and Health Survey, we analyze how sex education relates with the sexual behavior of women 15–24 years old. Our analysis of sexual behaviors by young adult females in recent national surveys does not corroborate this claim. Ultimately, it is ironic that their future is being jeopardized by well-meaning opposition to the RH law, which calls for keeping women better informed about sex-related risks, unwanted pregnancies, their consequences, and ways of avoiding them.

Rising sex-related risks, early sexual experience, and unwanted pregnancies are major concerns of Filipinos. Young adults are becoming more sexually active. Among females 15–19 years old, 6.7 percent reported being sexually active in 2003. Ten years later, this number has increased to 7.9 percent. Between 2003 and 2013, the proportion of teen mothers has increased from 6.1 percent to 7.7 percent. Unfortunately, over the same period, the proportion of them who have never heard about HIV/AIDS<sup>1</sup> almost doubled, increasing from 6.9 percent to 13.2 percent.

Early sexual initiation has lasting impact on life trajectories. Comparing cohabitating female siblings 25–29 years old, siblings who have had their first sexual experience during their teens have two to five years of education less compared to their sisters who have had their sexual debut after they reach 20 years old. This translates to a substantial 20–60 percent foregone income for siblings who have had earlier sexual initiation. This ultimately affects not only their personal economic wellbeing but also the quality and level of investments that they can afford for their children.

## The RH law and sexuality education

Although the country has been implementing family planning programs since the 1960s, it was only in 1999 that a comprehensive reproductive health (RH) bill was first

---

<sup>1</sup> AIDS or acquired immunodeficiency syndrome is a life-threatening disease caused by HIV or human immunodeficiency virus, which is sexually transmitted.

filed in Congress to institutionalize various RH services of government. Proponents of the several RH bill versions that have been filed recognized that access to accurate and appropriate RH information and services is important not only in demystifying sex among younger generations but also in addressing related development issues that arise from less-than-informed choices. By mandating a national RH program, an RH law would make much-needed RH services available to everyone.

In December 2012, Congress, after years of continuous and often heated debates, finally approved a comprehensive RH law that guarantees universal access to RH services, including age-appropriate RH and sexuality education in schools. It took another 16 months before the law was implemented, however, as its implementation was suspended when well-meaning opposition challenged the law's constitutionality in the Supreme Court. The court eventually ruled the RH law to be "not unconstitutional", with its key provisions remaining unscathed.

## Conservative opposition

Of the many points that were raised against the RH law, one argument, if found to be true, could both be a challenging public health concern and an alarming parenting issue: exposing children to reproductive health care, especially mandatory comprehensive RH and sexuality education, leads to earlier sexual initiation and higher rates of sexual activity among them. Jose Palma, Archbishop of Cebu and president of the Catholic Bishop's Conference of the Philippines, emphasized this objection in a 2013 pastoral letter<sup>2</sup> where he listed school-based sex education as part of a "long litany of storms". For Palma and many others, sex education brings "more promiscuity and teenage pregnancy".

Such sexual curiosity after all seems just natural and to be expected of adolescents with "raging hormones". By teaching about sexuality and reproductive health as part of a regular class subject, schools may inadvertently be promoting the early sexual awakening of young adults—who would now be armed with information on how to effectively circumvent costly and unwanted pregnancy. Instead of teaching adolescents of being more sexually responsible, many fear that school-based sex education would raise students' desire for sex. While plausible, evidences from studies here in the Philippines and in other developing countries, however, do not corroborate this claim.

---

<sup>2</sup> Palma (2013)

## What is the evidence?

Public health professionals and researchers at Johns Hopkins Bloomberg School of Public Health and at the Medical University of South Carolina (Fonner et al. 2014) reviewed 63 studies on school-based sex education interventions in low- and middle-income countries, including one from the Philippines. They found that students who attended school-based sex education interventions actually delay sexual initiation. In addition, these students generally are less sexually active and have greater HIV/AIDS knowledge, fewer sexual partners, and higher condom-use propensity. The researchers noted that programs that have the most significant effects are those that extended beyond the classroom setting, such as training health-care providers to offer youth-friendly services, distributing condoms, and involving teachers, parents, and the community in developing the interventions.

In the Philippines, scientists at the Research Institute for Tropical Medicine and the University of California (Aplasca et al. 1995) ran a randomized controlled experiment in four demographically similar high schools in Metro Manila in the early 1990s. Together with public high school teachers, local AIDS experts, social scientists, and health educators, they developed an AIDS prevention program designed to provide students with accurate information about HIV/AIDS. While the study did not look into actual sexual behavior after the intervention, the researchers found that students in the AIDS prevention program intend to delay their sexual initiation. Also, students in the intervention group have higher HIV/AIDS knowledge and have better attitudes toward people living with HIV/AIDS.

In August and September 2008, enumerators from the Philippine Statistics Authority (PSA, then known as the National Statistics Office) went around the country asking women about their reproductive history, marriage and sexual activity, fertility preferences, and family planning practices and knowledge, among others. PSA conducts this survey, called the National Demographic and Health Survey (NDHS), every five years to gather information on fertility, family planning, and health in the country. Although attendance in sex education classes was not asked in the survey, it did ask several questions probing each survey respondent's knowledge of HIV infection.

How many can you answer correctly? Take some time to answer these Yes/No questions before reading ahead.

1. Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?

2. Can people get the AIDS virus from mosquito bites?
3. Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?
4. Can people get the AIDS virus by sharing food with a person who has AIDS?
5. Can people reduce their chance of getting the AIDS virus by not having sexual intercourse at all?
6. Can people get the AIDS virus by hugging or shaking hands with a person who is infected?
7. Is it possible for a healthy-looking person to have the AIDS virus?

If you answered “Yes” to odd-numbered questions and “No” to the rest, congratulations, you got a perfect score! Young adult women 15–29 years old in 2008 were not as knowledgeable however. Among those between 15 and 19 years old, only 14.5 percent of the 2,766 surveyed correctly answered all seven questions (Table 1). One in every three received failing marks. One in every 10 has not gotten any answer correct! Tossing a fair coin would have gotten them correct answers half of the time. Scores improve with age group, but the pattern persists. A plurality of young adults has limited HIV/AIDS knowledge.

Although 92 percent of women 15–29 years old have heard about HIV/AIDS, about 3 in 20 do not know any of the three major methods of preventing HIV transmission, i.e., A – abstaining from sexual intercourse, B – being faithful to your partner, and C – consistently using condom during intercourse. Three of every five young adult females still believe that HIV may be transmitted by sharing food, hugging or shaking hands, or being bitten by mosquitoes.

How does your score make you feel... sexually? It turns out sex education, which we proxy by HIV/AIDS knowledge score, is indeed related to young adults' sexual

Table 1. HIV/AIDS knowledge score: NDHS 2008

	Age Group		
	15–19	20–24	24–29
Respondents (in %) with score	2,766	2,143	2,067
0	12.3	6.3	6.8
1–3	19.3	16.7	14.8
4–6	53.9	58.5	61.3
7	14.5	18.5	17.1

Source: 2008 National Demographic and Health Survey (NDHS), National Statistics Office (NSO) and ICF Macro 2009



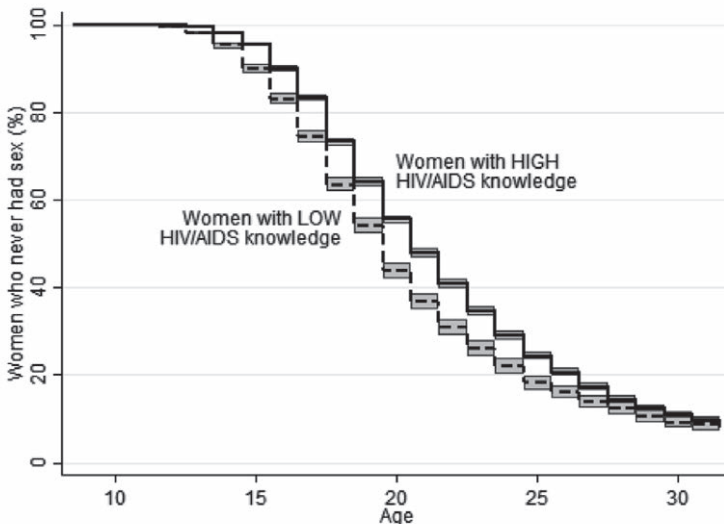
behavior. But the relationship is not in the way suggested by groups opposing school-based sex education.

Among all female respondents, those who correctly answered four of the seven HIV/AIDS questions generally have their first sexual experience later than those who did poorly on the same set of questions. Among females aged 20, for instance, only 44 percent of those with failing marks never had any sexual experience while a larger 55 percent of those with passing marks have been able to abstain from sex up to this age (Figure 1). On average, women who did better on these HIV/AIDS knowledge questions delay their sexual initiation by 26 months.

### Who voted for RH bill?

In 2008, Albay Representative Edcel Lagman filed House Bill 5043, a.k.a. the 2008 Reproductive Health Bill, which was supported by 46 other district and party-list representatives. Although Lagman, then of political party Lakas-KAMPI-CMD, was the primary author of the RH bill, then President Gloria Macapagal-Arroyo, who was also

Figure 1. Age at sexual initiation by HIV/AIDS knowledge score: NDHS 2008



Source: 2008 NDHS (NSO and ICF Macro 2009)

chairman of the party, did not support the bill. Interestingly, no Liberal Party member in the House of Representatives supported the 2008 RH Bill, although a revised version in 2012 was widely supported when fellow member President Benigno Aquino III certified the bill as urgent. Between the 2008 and 2012 versions, population-weighted odds of voting for the RH bill among district representatives jumped from 0.09 to 0.25. The president's leadership in rallying support appears to be crucial in making the RH bill gain traction in Congress.

Representatives who were in their last term, that is, those who were more likely to leave their incumbency to run for another, presumptively local, office were 7.4 percentage points less likely to vote for the 2008 RH Bill relative to first termers.<sup>3</sup> Those who were from more Catholic-concentrated districts were also less likely to vote for the bill. On the other hand, past HIV/AIDS knowledge and access to reproductive health services at the district level, lo and behold, are not as predictive<sup>4</sup> of representatives' RH bill vote.

Those who supported the 2008 RH Bill in Congress practically voted despite the president's opposition. This reveals the representatives' thrusts. On average, RH bill supporter-lawmakers represent districts with lower HIV/AIDS knowledge. Between 2008 and 2013, average HIV/AIDS knowledge among females 15–29 years old declined (Figure 2), but the fall is significantly larger among those who live in districts where their representatives voted against the RH bill in 2008.<sup>5</sup> During the same period, access to family planning services, which we proxy by accessibility of condoms, fell in districts of representatives who were sympathetic to the RH bill, although the slight drop was not enough to cancel the upward trend since 2003 (Figure 3). Taken together, this suggests that lawmakers' support of the RH bill was able to raise awareness despite the overall drop in HIV/AIDS knowledge, although this does not necessarily translate to provision of other RH services at the district level.

## More evidences

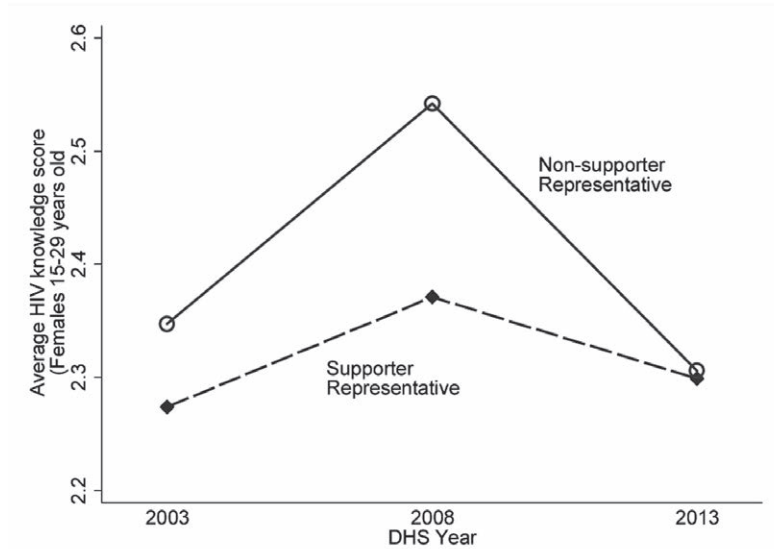
How district representatives voted in the 2008 RH Bill presents us with a natural experiment. District representatives may be seen as aggregators of information. That

<sup>3</sup> Ronald U. Mendoza provides an excellent analysis of how representatives had voted in the 2012 RH Bill version, House Bill 4244. See <http://www.rappler.com/thought-leaders/19566-dissecting-the-vote-on-the-rh-bill>.

<sup>4</sup> After purging the contribution of district-level characteristics as well as of district representative attributes

<sup>5</sup> Based on questions 1–4, which are common to the 2003, 2008, and 2013 rounds of NDHS.

Figure 2. HIV/AIDS knowledge of females aged 15–29 by district representative's 2008 RH bill vote



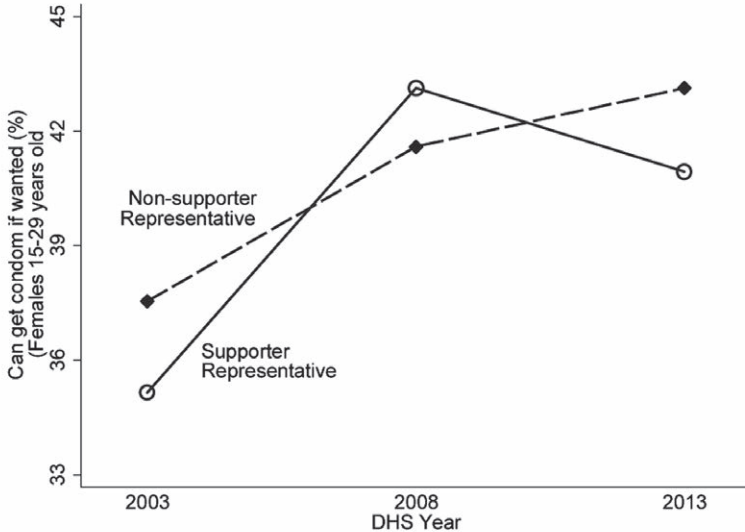
Source: Based on questions 1-4, which are common to the 2003, 2008, and 2013 rounds of NDHS

their voting behavior does not respond to past RH services available at their districts provides indication that their 2008 RH Bill votes are independent of local electorate demands. By comparing the HIV/AIDS knowledge and the sexual behaviors of young adults based on how their district representatives acted on the plenary, we can estimate the direct impact of raising RH knowledge on sexual behavior. Unfortunately, data from NDHS only allow us to estimate the impact for females.

Overall, we find that increasing HIV/AIDS knowledge lowers sexual activity, delays sexual transition, and increases condom use, although the impact masks the heterogeneity across age groups and across economic status.<sup>6</sup> In any case, this suggests that reproductive health and sexuality education do not raise our adolescent population's sexual desires but actually inhibits them. In addition, sex education also makes adolescents more sexually responsible by using condoms, which lowers the risks of spreading sexually transmitted infections.

<sup>6</sup> For a detailed discussion, see Abrigo (2016).

Figure 3. Access to condoms of females aged 15–29 by district representative's 2008 RH bill vote



Source: 2008 NDHS (NSO and ICF Macro 2009)

## Conclusion

Filipinos, especially teenagers and young adults, are not well-informed about sex-related issues that could intimately and personally affect them. Addressing this information deficiency with appropriately designed sex education can be beneficial. Contrary to critics' expectations, less-informed women tend to have earlier sexual initiation and higher rate of sexual activity among young adults. The evidence further indicates that those consequences will likely lead subsequently to reduced human capital, as manifested by lower level of educational attainment. It is ironic, therefore, that their future is being jeopardized by well-meaning opposition to the RH law, which calls for keeping women better informed about sex-related risks, unwanted pregnancies, their consequences, and ways of avoiding them.

Overall, we find that increasing HIV/AIDS knowledge lowers sexual activity, delays sexual transition, and increases condom use, although the impact masks the heterogeneity across age groups and across economic status (Table 2). It is true that

Table 2. Impact of HIV/AIDS knowledge on sexual behavior of females aged 15–29

How Representatives Voted on 2008 RH Bill	HIV/AIDS Knowledge	Sexually Active (%)	Age at First Sexual Initiation (Years)*	Condom Use (%)*
Aye (Yes)	3.7	34.9	19.0	0.7
Nay (No)	4.0	32.3	19.1	3.1
Knowledge effects**		-9.8	0.5	8.8

\* Conditional on being sexually active

\*\* Change in sexual behavior with respect to a unit increase in HIV/AIDS knowledge. Knowledge effects on propensities of sexual activity and condom use are in percentage points; those for age at sexual transition are in years.

Source: Estimates are based on the 2008 NDHS (NSO and ICF Macro 2009). HIV/AIDS knowledge scores are calculated based on the sum of seven Yes/No questions related to HIV/AIDS transmission. Knowledge effect estimates do not control for individual characteristics. See Abrigo (2016) for estimation details and further refinements.

there are risks in providing the youth with comprehensive sexuality education in public schools. But depriving them of government-mandated opportunities to learn about human sexuality and ways of dealing with sex-related issues also carries its own risks. It is not uncommon for the young to grow up without having quality time with parents and their surrogates about sex-related issues. Often, they get false information and bad advice from peers who also need proper sex education. In light of the evidence discussed above, it seems more prudent for the government to ensure that the youth get age-appropriate sex education than keep them ignorant.

There are ways of dealing with concerns of premature and improper exposure to inappropriate materials. For example, school officials can work together with parents, community leaders, teachers, local experts, social scientists, and health educators to develop a sex education program that is designed to provide students with accurate information about HIV/AIDS and other sex-related issues that are important for them to learn about. Additionally, a regular review by a group of eminent persons supported by data produced by an independent research group can be established to ensure sex education programs are appropriate and effective. On this suggestion, impact evaluation of sex education programs in schools coupled with good monitoring would be valuable in ensuring that legitimate concerns about the implementation of the RH law comprehensive education mandate are addressed opportunistically.

Arguably, it is better to develop a sex education program based on a deep consultative process with key stakeholders and evaluate its impact than preventing

government from providing students opportunities to learn from professionally developed sex education programs solely on preconceived ideas of their consequences. Moral beliefs and good intentions alone are not enough to determine whether a policy position is beneficial or detrimental to the well-being of the country's citizens. Empirical evidence is necessary to protect them against the unintended consequences of well-meaning but misinformed policy stance. On this score, rigorous evaluation of the impact of sexuality education is valuable.

## References

- Abrigo, M.R.M. 2016. HIV/AIDS knowledge and sexual behavior of young adults in the Philippines. In, *Health over the lifecycle: Essays on Health and Family*. Doctoral dissertation. University of Hawai'i at Manoa, USA.
- Aplasca, M.R.A., D. Siegel, J.S. Mandel, R.T. Santana-Arciaga, J. Paul, E.S. Hudes, O.T. Monzon, and N. Hearst. 1995. Results of a model AIDS prevention program for high school students in the Philippines. *AIDS* 9(Supplement 1):S7-13.
- Fonner, V.A., K.S. Armstrong, C.E. Kennedy, K.R. O'Reilly, and M.D. Sweat. 2014. School-based sex education and HIV prevention in low- and middle-income countries: A systematic review and meta-analysis. *PLOS ONE* 9(3, e89692):1-18.
- National Statistics Office (NSO) and ICF Macro. 2009. *2008 National Demographic and Health Survey*. Manila, Philippines and Calverton, MD: NSO and ICF Macro.
- Palma, J.S. 2013. Proclaim the message, in season and out of season. A pastoral statement of the CBCP on certain social issues of today. *CBCP News*. January 28. Manila, Philippines: Catholic Bishops' Conference of the Philippines. <http://www.cbcnews.com/cbcnews/?p=12376> (accessed on June 30, 2016).



## The Authors

**Michael R.M. Abrigo** is a research fellow at the Philippine Institute for Development Studies (PIDS). He has a PhD in Economics from the University of Hawaii at Manoa. He was a postdoctoral fellow at the East-West Center in Honolulu, Hawaii. His areas of specialization are in health, labor, and population economics.

**Marife M. Ballesteros** is the vice president of PIDS. She has a PhD in Social Sciences from the University of Nijmegen, Netherlands. Her areas of specialization are development economics and housing and urban development issues.

**Roehlano M. Briones** is a senior research fellow at PIDS. He has a PhD in Economics from the University of the Philippines. His areas of specialization are in agriculture, CGE modeling, and rural development.

**Milva Lunod-Carinan** is currently taking up her Masters in Development Economics at the University of the Philippines. She works with the Department of Agriculture as a planning officer of the Philippine Rural Development Program.

**Danilo C. Israel** was a senior research fellow at PIDS. He has a PhD in Applied Economics from Clemson University and a postdoctoral degree from the University of British Columbia. He specializes in resource and environmental economics and fisheries economics.

**Leonardo A. Lanzona Jr.** is the director of the Ateneo Center for Economic Research and Development at the Ateneo de Manila University. He has a PhD in Economics from the University of the Philippines and a postdoctoral degree at Yale University. His fields of interest are labor economics, development economics, and econometrics.

**Gilberto M. Llanto** is the president of PIDS. He was deputy director-general (undersecretary) of the National Economic and Development Authority, vice president of PIDS, and president of the Philippine Economic Society. He has a PhD in Economics from the University of the Philippines. He has written and published papers on financial markets, public economics, local governance, institutional economics, and infrastructure regulation.

**Aniceto C. Orbeta Jr.** is a senior research fellow at PIDS. He has a PhD in Economics from the University of the Philippines and a postdoctoral degree from Harvard University. He was a professorial lecturer of the University of the Philippines School of Economics. He is an economist specializing in applied economic modeling, impact evaluation, social sector issues, demographic economics, and information and communication technologies.



**Vicente B. Paqueo** is a distinguished visiting fellow at PIDS. He has a PhD in Economics from the University of the Philippines. He was a lead economist of the World Bank in Washington, D.C. and a professor of the University of the Philippines School of Economics. His areas of specialization are in education, social protection, and human development.

**Tatum P. Ramos** is a research analyst at PIDS. She obtained a Bachelor's Degree in Economics from the University of the Philippines. She has provided research assistance in the areas of housing and labor.

*The law of unintended consequences, often cited but rarely defined, is that actions of people and especially of government always have effects that are unanticipated or unintended. Economists and other social scientists have heeded its power for centuries; for just as long, politicians and popular opinion have largely ignored it.*

- Rob Norton

This is a book on the law of unintended consequences dedicated to students, thinkers, dreamers, or the ordinary *pilosopo* who are encouraged to discover truth—even at the expense of shattering “common sense” or widely shared beliefs—by looking at the data. Each chapter features arguments supported by rigorous attention to facts and clearly linked evidence in a language that is accessible to most readers. The topics covered in this book range from daily concerns like traffic, food, salary, rent to larger industry and environmental concerns like overfishing and logging. The book also tackles controversial topics like sex education, the minimum wage, conditional cash transfer, and unemployment.



**Philippine Institute for Development Studies**  
*Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas*

18th Floor, Three Cyberpod Centris - North Tower  
EDSA corner Quezon Avenue, 1100 Quezon City, Philippines  
Telephone Numbers: (632) 877-4000; 372-1291 to 92  
Website: <http://www.pids.gov.ph>  
Email: [publications@mail.pids.gov.ph](mailto:publications@mail.pids.gov.ph)