UP School of Economics
Discussion Papers

Discussion Paper No. 2012-18 November 2012

Reforming Institutions and Building Trust To Achieve Sustained Economic Development

by

Desiree A. Desierto*

* University of the Philippines School of Economics

Reforming Institutions and Building Trust To Achieve Sustained Economic Development

(Paper prepared for the Philippines Update 2012, Australian National University)

Desiree A. Desierto[1]
University of the Philippines School of Economics
This version: November 30, 2012

Preliminary Draft – Not to be Quoted without Permission

ABSTRACT

The Philippines now appears well poised for an economic take off and sustained long-run growth. It recently posted an impressive 6.4% growth in the first quarter of 2012, up from 4.9% in the same period last year, has experienced a surge in merchandise exports, and is on the brink of an investment boom, especially in infrastructure projects and in the services sector. It has also weathered the recent global economic crisis, with rising overseas remittances continuously fueling strong consumer demand. Most importantly, the current Administration has demonstrated its strong commitment towards institutional reform through its anti-corruption strategies. The Philippines may thus finally be on the cusp of what Acemoglu and Robinson call a 'critical juncture' that can push its trajectory towards the development of more 'inclusive' institutions, enabling continued increases in productivity and sustaining economic growth. However, focusing solely on anti-corruption for its sake may also undermine lasting institutional reform if property rights, contract enforcement and stability are weakened in the course of enforcing against anomalous transactions. What may be an optimal strategy is to treat anti-corruption as part of a larger overall framework of building trust in society.

INTRODUCTION

The Philippines recently posted an impressive 6.4% growth in the first quarter (Q1) of 2012, up from 4.9% in the same period last year, has experienced a surge in merchandise exports, and now appears on its way towards the first investment boom since the 1997 Asian financial crisis. Such a boom is likely to come from large infrastructure projects and further development of the services sector, especially business process outsourcing (BPO). It has also weathered the recent global economic crisis, with rising overseas remittances continuously fueling strong consumer demand. At the same time, however, most of the growth has come from the services sector, while growth in agriculture and industry have decreased.

[1] The author wishes to thank Hal Hill, Paul Hutchcroft, participants at the Philippines Update 2012, and Emmanuel De Dios for comments and suggestions.

Investments in the form of public-private partnerships (PPPs) and private investments in special trade zones administered by the Subic Bay Metropolitan Authority (SBMA), Clark Development Corporation (CDC), and Philippine Economic Zone Authority (PEZA) are flourishing, whereas investments coursed through the Board of Investments (BOI) have slowed down. Net foreign direct investments have gone up, but the capital and financial accounts are down despite the opportunities from the global downturn and massive capital flight from abroad and the country's improvement in credit (S&P) ratings.

Underlying the current Administration's efforts is its primary thrust of eradicating corruption through its '*Matuwid na Daan'* ("straight path") strategy. The seriousness with which the Administration has pursued anti-corruption reforms signals that the Philippines may finally be on the cusp of what Acemoglu and Robinson (2012) call a 'critical juncture' that can push its trajectory towards the development of more 'inclusive' institutions, enabling continued increases in productivity and sustaining economic growth. However, focusing solely on anti-corruption for its sake may also undermine lasting institutional reform if property rights, contract enforcement and stability are weakened in the course of enforcing against anomalous transactions. What may be an optimal strategy is to treat anti-corruption as part of a larger overall framework of building trust in society.

The next section provides a brief overview of the Philippine economy in the last two decades, while section 3 focuses on more recent progress during the Aquino Administration. Section 4 analyzes the strategy of anti-corruption within the current and broader literature on institutions and trust, and section 5 concludes.

THE PHILIPPINE ECONOMY

Unlike the experience of many Asian countries, Philippine economic growth has not been export driven, but rather largely fueled by private consumption.[2] (See Figure 1.) In fact, between 1990 and 2010, net exports have mostly been negative. Hence, capital formation has not been a priority - while the share of consumption in GDP growth even grew from 73.8 percent in 1990 to 79 percent in 2010, the share of net capital formation dropped from 24 percent in 1990 to 18.5 percent in 2010.

Strong consumption demand has been maintained even after the 1997 Asian Financial crisis and the more recent Global crisis, mainly because of sizeable and sustained remittances from overseas Filipino workers (OFWs) which have propped up GNP over GDP - note that the difference between GNP and GDP is net factor income from abroad. Such remittances have helped increased national savings to more than 30 percent of GDP since 1999. (Remittances themselves contribute to over 10% of GDP.)

That such savings have fuelled consumption more than investment is evident in Figure 3 where it can be seen that share of Gross Domestic Capital Formation (GDCF)

[2] The analysis in this section is based on Desierto and Ducanes (2012).

as percentage of GDP has been decreasing in the recent decade even while Gross National Savings (GNS) and the current account surplus (CA) as percentage of GDP have been clearly rising.

It thus appears that the Philippines has not taken full advantage of this low-lying fruit from its labor export. While in 2010 it received the fourth largest amount of foreign remittances at US$ 21.3 billion (following India, China and Mexico), investments have not grown and exports have been left behind. Not surprisingly, then, manufacturing industry and agricultural production have remained low, compared with services (see Figure 4) which has been expanding in the last decade mainly due to the Business Process Outsourcing (BPO) sector that has been growing over 20 percent per year. (By 2011, the Philippines had already surpassed India as the top call center destination in the world.)

There is also no evidence that OFW remittances are being used by recipients to invest in microenterprises, unlike in other countries (see Woodruff and Zenteno for the experience in Mexico.) A recent study by Tan (2012) also casts doubt as to the resiliency of remittances to global downturns – she argues that while the global recession has so far had a minor impact on remittances, the ongoing uncertainty in the US and Europe might yet eventually decrease demand for OFWs. Finally, there is also the problem of brain drain to contend with, as documented by Schiff and Ozden (2005) for the Philippines and other labor-exporting countries.

Despite the boom in the services sector, poverty rates have been rising – from 24.5% in 2003 to 26.5% in 2009, while incomes have grown more unequal. Such trends may have been likely due to the uneven growth of the sectors, especially the low productivity and continued deceleration of the agriculture sector, since one-third of the country's labor force is still employed in agriculture.

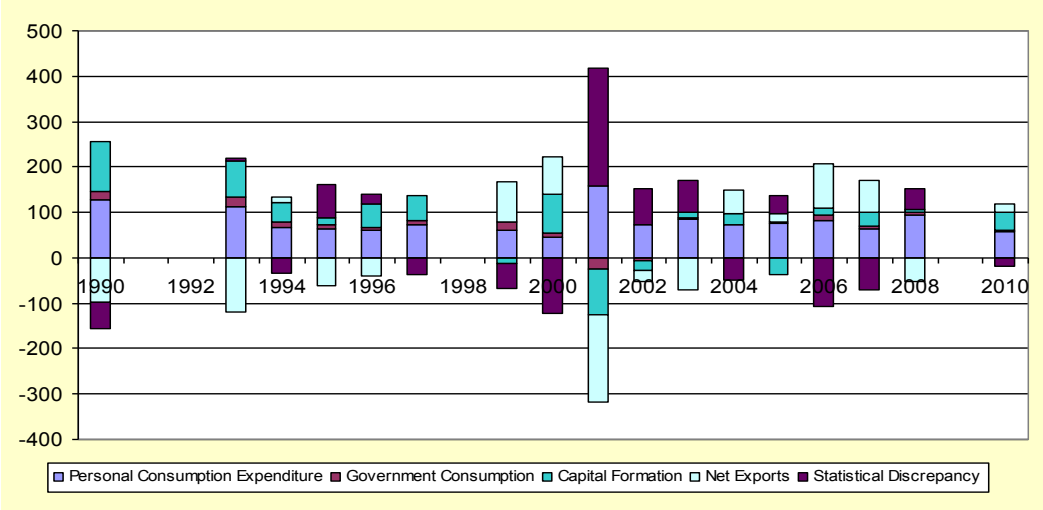
What accounts for the country's low investment rates? Many explanations have been put forth describing the structural rigidities and institutional weaknesses in the country (see Balisacan and Hill 2003). For instance, labor market conditions may be preventing the industrial sector to take off (see Nye 2011). Esguerra (2010) notes that in 2007 the Philippines had the 28th highest minimum wage in the world, and 8th among 30 developing and transition economies. More recently, the World Bank reported on the inflexibility of the Philippine labor market. Together with weak agrarian reform, property rights and bureaucracy that have hampered agricultural productivity (see Fabella (2009) and David (2003)), rapid structural transformation (i.e. movement from agriculture to industry) has been impeded.

Most other explanations emphasize the underlying historical and institutional structures – from cronyism that has bred a culture of corruption and rent-seeking (see De Dios and Hutchcroft (2003)), to the weakness of the public sector and administrative processes, red tape and bureaucratic inefficiencies (see HDN 2009.)

Overall, such factors have generally undermined the competitiveness of Philippine business. In fact, in 2010-11, the Philippines was ranked 85 out of 139 countries in

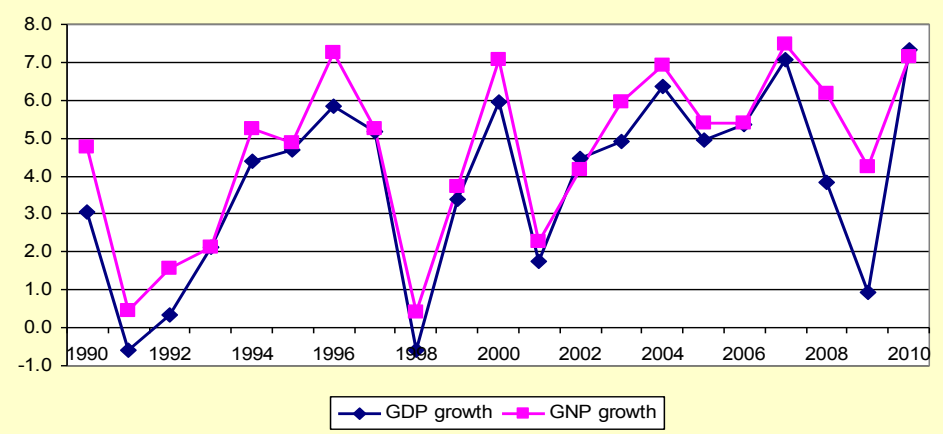
the World Economic Forum Global Competitiveness Index, where specifically it was rankied 125th in institutions, 111th in labor market efficiency, 111th in innovation, and 104th in infrastructure. It also placed low overall in the World Bank's Ease of Doing Business rankings (148th out of 183 countries), ranking 156th and 153rd, respectively, in Starting and Closing a Business, 132nd in Protecting Investors, 128th in Getting Credit (128th), 124th in Paying Taxes (124th), and 118th in Enforcing Contracts.

Figure 1. Consumption-side Sectoral Contribution to GDP Growth (sum to 100%)



Note: Years when GDP growth was less than one percent or negative were excluded.
Source: Desierto and Ducanes (2012)

Figure 2. GDP and GNP Growth



Source: Desierto and Ducanes (2012)

Figure 3. Philippine Savings and Investment Rate

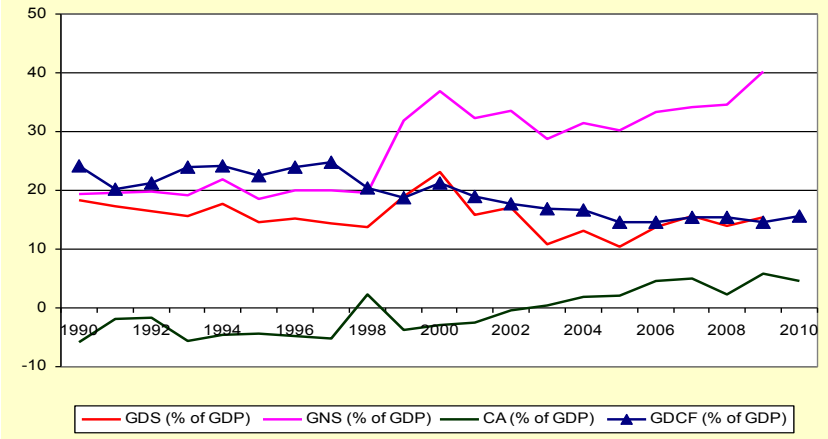
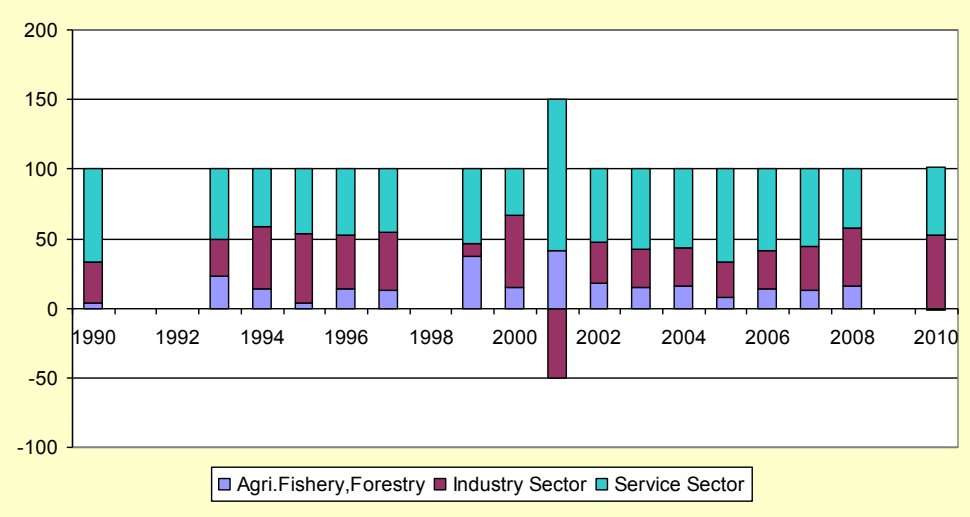


Figure 4. Production-side Sectoral Contribution to GDP Growth (sum to 100%)



Note: Years when GDP growth was less than one percent or negative were excluded.

Source: Desierto and Ducanes (2012)

RECENT DEVELOPMENTS

The new Aquino administration, in its pursuit of 'inclusive growth', identifies three key reasons why economic and social progress have been elusive: slow economic growth, inequality, and corruption. (See the Philippine Development Plan 2011-16 by the National Economic Development Authority (NEDA) 2011.) It aims to generate sustained high growth that creates jobs and reduces poverty by increasing investments in infrastructure, improving governance, and fostering human development.

As detailed in NEDA (2011), infrastructure investments shall be funded by better tax collection and rationalization and, more importantly, through the use of public-private partnership (PPP) agreements in high-priority areas such as transportation, power and water, where the Philippines has remained a laggard

in the region. NEDA (2011) reports, for instance, that as of 2008, access to water has still been biased towards urban areas which enjoy 93 percent coverage, compared to only 87 percent in rural areas. Irrigation is also a problem, with only 49 percent of the country's total irrigable area having thus been developed, and also unequally – with 81 percent already developed in the Cordillera Autonomous Region (CAR), but only 15 percent in the Autonomous Region of Muslim Mindanao (ARMM) and between 30 to 70 percent in the other regions. As of 2009, around 75 percent of national roads have been paved, compared to only 30 percent of provincial roads. In 2010, the cost of electricity in the country was US$ 0.10 per kwh, while it was only $0.08 in China, $0.07 in Malaysia, Indonesia and Vietnam, and $0.06 in Thailand. Construction costs are also very high, about $1,000 per square meter compared to about $100 in China, $200 in Indonesia and $300 in Malaysia and Thailand. Such high costs have been attributed by the Administration to "the lack of real competition in strategic sectors such as agriculture, maritime and air transport, power, cement and banking," where in some cases "dominant firms can exert enough social influence and political clout to limit entry" (NEDA 2011).

PPPs provide a mechanism by which private-sector involvement in the financing, construction, operation and maintenance of infrastructure projects are fast-tracked and streamlined, since the government solicits proposals for competitive bidding based on what it identifies as priority projects and is committed to process such solicited proposal within six months. In some cases, the government can also provide protection from 'regulatory risk' ensuing from court orders or decisions of regulatory agencies, by guaranteeing payments or adjusting contract terms. (See http://www.ppp.gov.ph.) There are 22 PPP projects lined up until 2016, eight of which are expected to be rolled out this year.[3]

The Administration has also declared its commitment to improve overall governance and eradicate cronyism and sources of rent-seeking and corruption. This would involve reforms in the budgetary process, public procurement and awarding of contracts, as well as in administrative and regulatory processes, enforcement of rules and laws, monitoring, and prosecution of corrupt officials. This anti-corruption drive is perhaps the strongest component of the Administration's development strategy. In fact, it has unequivocally voiced out its belief that corruption "robs our children of their protection, nutrition and education; destroys our families and communities; steals from our farmers and workers; and deters businessmen from investing in our economy" (NEDA 2011, special chapter "A Social Contract with the Filipino People".)

The Administration also acknowledges the need for investments in human capital, mainly in education, health, and social safety nets and protection. One of its major reforms to enhance learning is the institution of the K+12 system. It also aims to increase coverage of the National Health Insurance program, and invest in more public health care facilities and programs. Human development of

[3] *The Philippine Star* September 24, 2012: http://www.philstar.com/Article.aspx?articleId=852043

the poor will be accelerated through the implementation of small-scale projects at the *barangay* (town) level – the KALAHI-CIDSS program - financed by the national and local governments, and of the *Pantawid Pamilyang Pilipino Program* (4Ps), a conditional cash transfer program which entails awarding grants to poor households with children 0-14 years old and/or pregnant women on the condition that school-aged children attend at least 85 percent of their classes and that children and pregnant women take part in required public health programs. The education grant is currently set at PhP 300 per school month per child, while the health grant is PhP 500 per month per household (see Labonne 2012.) Labonne reports that by 2009, a total number of about 300,000 households have been awarded grants, and by the end of then Pres. Macapagal-Arroyo's term in June 2010, coverage had reached 700,000 households. He also mentions the present Administration's continued support for the 4Ps, declaring its intention to increase coverage to 1 million households by the end of 2010 and 2.3 million by the end of 2011. In the most recent State of the Nation Address (SONA) in July 2012, President Aquino further increased this target to 3.1 million within two years.[4]

The Development Plan does not specifically indicate that the Philippines might start pursuing more merchandise export-driven growth, but it acknowledges and aims to promote the further expansion of service exports, particularly the BPO sector and Tourism as major sources of growth. As shown in Yi (2011), services exports have clearly outstripped goods exports in the current decade (see Figure 5). However, while the growing success in BPOs is undeniable, Tourism has provided a mixed picture – with tourism arrivals increasing but not necessarily translating into revenues (see Figure 6). The Plan thus highlights the importance of increasing productivity and competitiveness, especially in priority areas, not just in tourism and BPO, but in other high-growth potential sectors such as mining, agri-business and forest-based industries, logistics, shipbuilding, housing, electronics and infrastructure.

How has the Administration performed thus far? In the first quarter (Q1) of 2012, the Philippines posted an impressive 6.4 percent GDP growth (see Figure 7), which was highest in Southeast Asia and second only to China in the whole Asian region. This was a marked improvement from the 4.6 percent growth in Q1 2011, but smaller than the 8.4 percent growth in the Q1 2010 (see Figure 8). The unemployment rate decreased from 7.2 percent in April 2011 to 6.9 percent in April 2012, although the number of employment generated decreased slightly from 1,047,000 to 1,021,000.

There seems to be no substantial change in the composition and sources of GDP growth – in terms of production, much of the growth is still driven by the services sector, while in terms of expenditure, consumption has grown faster than investment or net exports. If anything, services has grown even faster from 3.6 percent in Q1 2011 to 8.5 percent in Q1 2012, while agriculture and industry

[4] For a transcript of the President's speech, see: http://www.gmanetwork.com/news/story/266445/news/nation/president-benigno-aquino-iii-s-third-state-of-the-nation-address-english

have slowed down considerably from 4.4 and 7.3 percent growth, respectively, in Q1 2011 to 1.0 and 4.9 percent growth, respectively, in Q1 2012.[5] Merchandise exports grew from (-9.3) percent in June 2011 to 4.3 percent in June 2012. Such growth, however, is still far from the 24.7 percent growth of goods exports achieved in FY 2010 (see Figure 7). Even exports in services have slowed, from a 6.5 percent growth rate in FY 2010 to 3.4 percent in FY 2011. The growth rate of capital formation decreased from 31.6 percent in FY 2010 to 11.1 percent in FY 2011. FDIs still have negative growth rates, but FDI flows appear likely to increase – with an improved growth rate of total approved FDI of (-52.8) percent in Q1 2011 to (-16.3) percent in Q1 2012. SBMA investments (investments approved and administered by the Subic Bay Metropolitan Authority), in particular, have posted the largest (positive) growth rate at 139.4 percent Q1 2012. Note, however, that while Philippine Economic Zone Authority (PEZA) and Clark Development Corporation (CDC) investments also showed improvements, investments approved and administered by the Board of Investments (BOI) have slowed down from 66.8 percent growth in Q1 2011 to 53.3 percent in Q1 2012.

Of course, the sluggish performance of exports and investments may be due to the global economic slowdown. At least, however, one could expect that the Philippines ought to be able to take advantage of capital flight from abroad, especially since the country has enjoyed improvements in its financial standing and credit ratings. This does not appear to be the case, however. The first quarter 2012 report of the *Bangko Sentral ng Pilipinas* (Central Bank of the Philippines) (BSP 2012) reveals that portfolio inflows halved – from US$ 2.7 billion in Q1 2011 to $1.3 billion to Q1 2012 - due to an increase in risk aversion for Philippine debt securities and sovereign bonds, as evidenced by the widening of the Philippine Emerging Bond Index plus (EBMI+) and credit default swap spreads.

Nevertheless, the Administration appears to have made substantial improvements in terms of its human development goals. At the end of 2011, more than 2 million households have been receiving cash transfers from the 4Ps, and in 2010 this has increased to 3 million households. The purported results, as Pres. Aquino reports in his 2012 SONA, are that over 1.6 million mothers are now benefiting from regular health checkups, over 1.6 million children have been vaccinated against various diseases, and over 4.5 million school children have been regularly attending classes. Membership in the Philippine Health Insurance, or PhilHealth, also increased from 62 percent at the start of the Aquino Administration to 85 percent at present, which includes over 5 million poorest households. Thousands of nurses and midwives have been deployed, especially to poor municipalities, and the number of dengue cases went down considerably due to the government's provision of anti-dengue mosquito traps. A 43.61 percent increase in the budget allocation for State Universities and

[5] See Figure 7, which is from NEDA. There are slight differences between the NEDA data and the National Statistics Coordination Board data of Figure 8. According to the latter, in Q1 2011 services grew by 3.2, industry 7.3 and agriculture 4.3 percent.

Colleges (SUCs) has been proposed, and the backlog of over 60,000 public school classrooms is expected to be cleared by the end of the year.

However, poverty appears to have worsened, at least according to surveys of hunger conducted by the Social Weather Station which show that while severe hunger decreased from 14.7 percent in March 2011 to 5.8 percent in March 2012, moderate hunger increased from 15.7 and 23.8 percent between the same periods. (See http://sws.org.ph.) Also, while the efforts of the current Administration in pushing for public sector social programs may be laudable, there is also the danger that increased reliance on anti-poverty programs pursued by the current Administration may undermine political and electoral competition. For instance, Labonne (2012) shows that in municipalities in which the 4Ps were implemented in 2008-09, an incumbent politician had a vote share in the 2010 elections that was 26 percentage points higher than non-incumbent candidates.

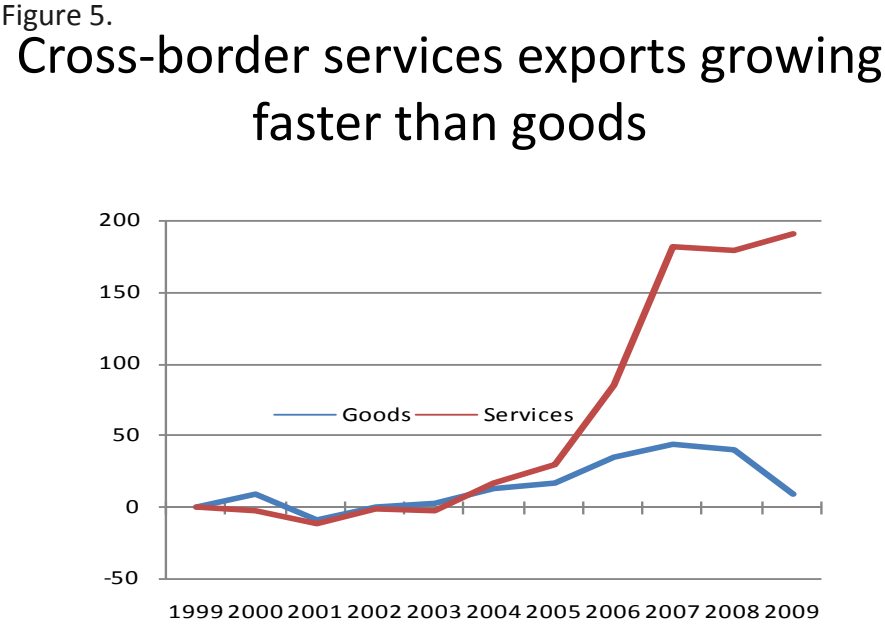
What is perhaps most striking about the present Administration's achievements is its anti-corruption drive which has impressed even the global community (see, e.g., Rushford 2012). Unprecedented events have demonstrated the Administration's commitment towards a corruption-free society, including the impeachment of Supreme Court Justice Renato Corona, and the cancellation of large-scale government contracts that are allegedly anomalous. In Pres. Aquino's first year alone, the Department of Public Works and Highways (DPWH) reportedly cancelled 900 contracts.[6] At the same time, however, this has raised concerns regarding the commitment of the government to uphold contracts and property rights (GlobalSource 2011 and Desierto and Ducanes 2012). It is also still unclear whether the anti-corruption strategy has been effective and sustainable over the long run. On one hand, in terms of its Corruptions Perceptions Index (CPI), the Philippines has improved its score from 2.4 in 2009 and 2010 to 2.6 in 2011, and has pushed up its ranking from 134th in 2010 to 129th in 2011 out of 183 countries (see www.transparency.org, also www.economywatch.com/economic-statistics/Philippines/Corruption_Perceptions_Index.) However, such levels are not necessarily better than those achieved during past Administrations. In 2006, the country was ranked 121st and had a score of 2.5, and in 2001 it was ranked even higher at 69th and had a score of 2.9. Also, the recent 2012 Economic Freedom Index shows that while the Philippines has improved its overall ranking, its score in the Rule of Law criteria, specifically Freedom from Corruption and Property Rights has not changed (see http://www.heritage.org/index/country/philippines.)

Desierto and Ducanes (2012) show how enforcing against corruption by limiting anomalous economic activity (e.g. cancelling contracts) can lead to more inefficiencies, compared with allowing greater competition and free trade that

[6] Sec. Corazon 'Dinky' Soliman of the Department of Social Welfare and Development (DSWD) mentions this in her keynote address at the Philippines Update 2012. See video: http://www.youtube.com/watch?v=NTKg4NgkKKA&playnext=1&list=PL93179B23996E4666&feature=results_video)

can 'bid down' rent-seeking. (See also Beck and Maher 1986 and Lien 1986; also Bardhan (1997) for a review.) Using recent Philippine time series data, the authors also estimate that generally the most important 'institutional' barriers to FDI have been weak contract enforcement and corruption, with one specification showing that corruption appears to have had a smaller effect than contract enforcement. This is not entirely surprising, as other research have shown that rapid growth and development can still occur amidst corruption, for as long as there is sufficient 'institutional certainty' that guarantees contract enforcement (Pritchett 2003; see also Shleifer and Vishny 1993, Wei 1995 and Campos et. al 1999.)

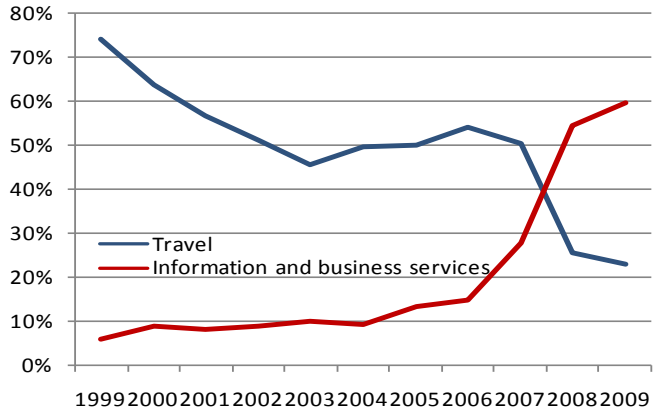
Figure 5.



Source: Yi (2011), slide 3

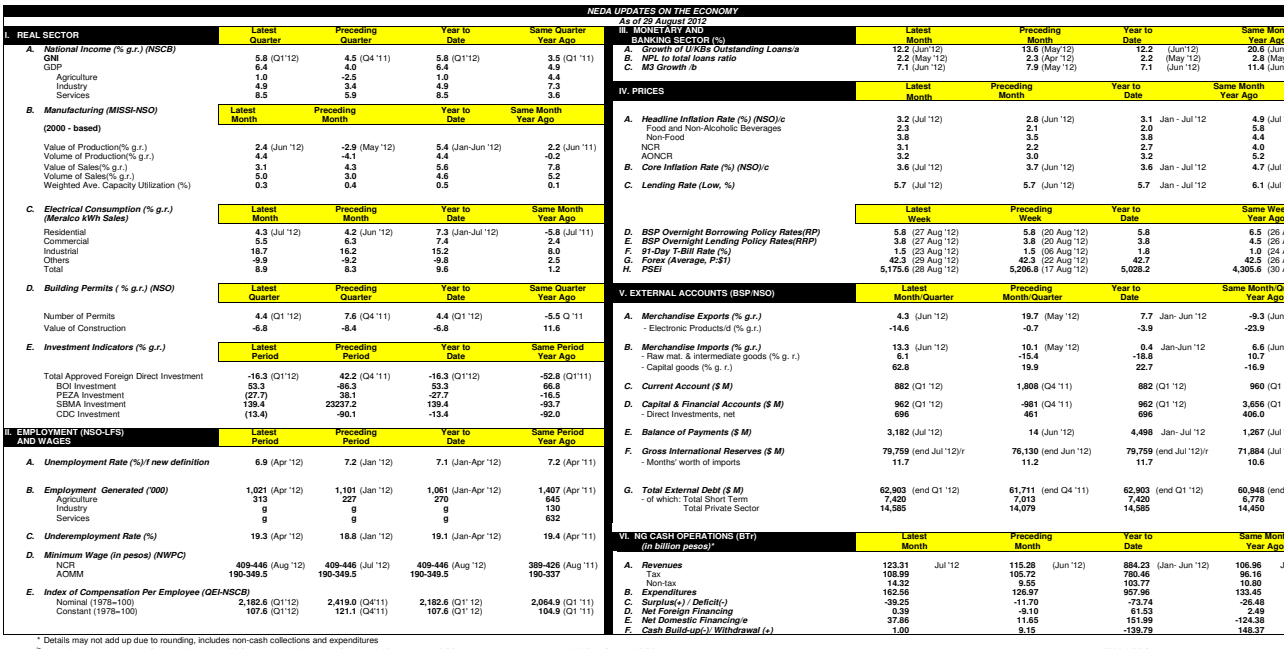
Figure 6.

A mixed picture between tourism and BPO



Source: Yi (2011), slide 8

Figure 7. Key Economic Indicators, Q1 2011 to Q1 2012



NEDA UPDATES ON THE ECONOMY

As of 29 August 2012

I. REAL SECTOR	Latest Quarter	Preceding Quarter	Year to Date	Same Quarter Year Ago
A. National Income (% g.r.) (NSCB)				
GNI	5.8 (Q1'12)	4.5 (Q4 '11)	5.8 (Q1'12)	3.5 (Q1 '11)
GDP	6.4	4.0	6.4	4.9
Agriculture	1.0	-2.5	1.0	4.4
Industry	4.9	3.4	4.9	7.3
Services	8.5	5.9	8.5	3.6
B. Manufacturing (MISSI-NSO)	Latest Month	Preceding Month	Year to Date	Same Month Year Ago
(2000 - based)				
Value of Production(% g.r.)	2.4 (Jun '12)	-2.9 (May '12)	5.4 (Jan-Jun '12)	2.2 (Jun '11)
Volume of Production(% g.r.)	4.4	-4.1	4.4	-0.2
Value of Sales(% g.r.)	3.1	4.3	5.6	7.8
Volume of Sales(% g.r.)	5.0	3.0	4.6	5.2
Weighted Ave. Capacity Utilization (%)	0.3	0.4	0.5	0.1
C. Electrical Consumption (% g.r.) (Meralco kWh Sales)	Latest Month	Preceding Month	Year to Date	Same Month Year Ago
Residential	4.3 (Jul '12)	4.2 (Jun '12)	7.3 (Jan-Jul '12)	-5.8 (Jul '11)
Commercial	5.5	6.3	7.4	2.4
Industrial	18.7	16.2	15.2	8.0
Others	-9.9	-9.2	-9.8	2.5
Total	8.9	8.3	9.6	1.2
D. Building Permits (% g.r.) (NSO)	Latest Quarter	Preceding Quarter	Year to Date	Same Quarter Year Ago
Number of Permits	4.4 (Q1 '12)	7.6 (Q4 '11)	4.4 (Q1 '12)	-5.5 Q '11
Value of Construction	-6.8	-8.4	-6.8	11.6
E. Investment Indicators (% g.r.)	Latest Period	Preceding Period	Year to Date	Same Period Year Ago
Total Approved Foreign Direct Investment	-16.3 (Q1'12)	42.2 (Q4 '11)	-16.3 (Q1'12)	-52.8 (Q1'11)
BOI Investment	53.3	-86.3	53.3	66.8
PEZA Investment	(27.7)	38.1	-27.7	-16.5
SBMA Investment	139.4	23237.2	139.4	-93.7
CDC Investment	(13.4)	-90.1	-13.4	-92.0

II. EMPLOYMENT (NSO-LFS) AND WAGES	Latest Period	Preceding Period	Year to Date	Same Period Year Ago
A. Unemployment Rate (%)/f new definition	6.9 (Apr '12)	7.2 (Jan '12)	7.1 (Jan-Apr '12)	7.2 (Apr '11)
B. Employment Generated ('000)	1,021 (Apr '12)	1,101 (Jan '12)	1,061 (Jan-Apr '12)	1,407 (Apr '11)
Agriculture	313	227	270	645
Industry	g	g	g	130
Services	g	g	g	632
C. Underemployment Rate (%)	19.3 (Apr '12)	18.8 (Jan '12)	19.1 (Jan-Apr '12)	19.4 (Apr '11)
D. Minimum Wage (in pesos) (NWPC)				
NCR	409-446 (Aug '12)	409-446 (Jul '12)	409-446 (Aug '12)	389-426 (Aug '11)
AOMM	190-349.5	190-349.5	190-349.5	190-337
E. Index of Compensation Per Employee (QEI-NSCB)				
Nominal (1978=100)	2,182.6 (Q1'12)	2,419.0 (Q4'11)	2,182.6 (Q1' 12)	2,064.9 (Q1 '11)
Constant (1978=100)	107.6 (Q1'12)	121.1 (Q4'11)	107.6 (Q1' 12)	104.9 (Q1 '11)

III. MONETARY AND BANKING SECTOR (%)	Latest Month	Preceding Month	Year to Date	Same Mon Year Ago
A. Growth of U/KBs Outstanding Loans/a	12.2 (Jun'12)	13.6 (May'12)	12.2 (Jun'12)	20.6 (Jun
B. NPL to total loans ratio	2.2 (May '12)	2.3 (Apr '12)	2.2 (May '12)	2.8 (Ma
C. M3 Growth /b	7.1 (Jun '12)	7.9 (May '12)	7.1 (Jun '12)	11.4 (Jun

IV. PRICES	Latest Month	Preceding Month	Year to Date	Same Month Year Ago
A. Headline Inflation Rate (%) (NSO)/c	3.2 (Jul '12)	2.8 (Jun '12)	3.1 Jan - Jul '12	4.9 (Jul
Food and Non-Alcoholic Beverages	2.3	2.1	2.0	5.8
Non-Food	3.8	3.5	3.8	4.4
NCR	3.1	2.2	2.7	4.0
AONCR	3.2	3.0	3.2	5.2
B. Core Inflation Rate (%) (NSO)/c	3.6 (Jul '12)	3.7 (Jun '12)	3.6 Jan - Jul '12	4.7 (Jul
C. Lending Rate (Low, %)	5.7 (Jul '12)	5.7 (Jun '12)	5.7 Jan - Jul '12	6.1 (Jul
	Latest Week	Preceding Week	Year to Date	Same Wee Year Ago
D. BSP Overnight Borrowing Policy Rates(RP)	5.8 (27 Aug '12)	5.8 (20 Aug '12)	5.8	6.5 (26 /
E. BSP Overnight Lending Policy Rates(RRP)	3.8 (27 Aug '12)	3.8 (20 Aug '12)	3.8	4.5 (26 /
F. 91-Day T-Bill Rate (%)	1.5 (23 Aug '12)	1.5 (06 Aug '12)	1.8	1.0 (24 /
G. Forex (Average, P:$1)	42.3 (29 Aug '12)	42.3 (22 Aug '12)	42.7	42.5 (26 /
H. PSEi	5,175.6 (28 Aug '12)	5,206.8 (17 Aug '12)	5,028.2	4,305.6 (30 /

V. EXTERNAL ACCOUNTS (BSP/NSO)	Latest Month/Quarter	Preceding Month/Quarter	Year to Date	Same Month/Q Year Ago
A. Merchandise Exports (% g.r.)	4.3 (Jun '12)	19.7 (May '12)	7.7 Jan- Jun '12	-9.3 (Jun
- Electronic Products/d (% g.r.)	-14.6	-0.7	-3.9	-23.9
B. Merchandise Imports (% g.r.)	13.3 (Jun '12)	10.1 (May '12)	0.4 Jan-Jun '12	6.6 (Jun
- Raw mat. & intermediate goods (% g. r.)	6.1	-15.4	-18.8	10.7
- Capital goods (% g. r.)	62.8	19.9	22.7	-16.9
C. Current Account ($ M)	882 (Q1 '12)	1,808 (Q4 '11)	882 (Q1 '12)	960 (Q1
D. Capital & Financial Accounts ($ M)	962 (Q1 '12)	-981 (Q4 '11)	962 (Q1 '12)	3,656 (Q1
- Direct Investments, net	696	461	696	406.0
E. Balance of Payments ($ M)	3,182 (Jul '12)	14 (Jun '12)	4,498 Jan- Jul '12	1,267 (Jul
F. Gross International Reserves ($ M)	79,759 (end Jul '12)/r	76,130 (end Jun '12)	79,759 (end Jul '12)/r	71,884 (Jul
- Months' worth of imports	11.7	11.2	11.7	10.6
G. Total External Debt ($ M)	62,903 (end Q1 '12)	61,711 (end Q4 '11)	62,903 (end Q1 '12)	60,948 (end
- of which: Total Short Term	7,420	7,013	7,420	6,778
Total Private Sector	14,585	14,079	14,585	14,450

VI. NG CASH OPERATIONS (BTr) *(in billion pesos)**	Latest Month	Preceding Month	Year to Date	Same Mon Year Ago
A. Revenues	123.31 Jul '12	115.28 (Jun '12)	884.23 (Jan- Jun '12)	106.96 J
Tax	108.99	105.72	780.46	96.16
Non-tax	14.32	9.55	103.77	10.80
B. Expenditures	162.56	126.97	957.96	133.45
C. Surplus(+) / Deficit(-)	-39.25	-11.70	-73.74	-26.48
D. Net Foreign Financing	0.39	-9.10	61.53	2.49
E. Net Domestic Financing/e	37.86	11.65	151.99	-124.38
F. Cash Build-up(-)/ Withdrawal (+)	1.00	9.15	-139.79	148.37

* Details may not add up due to rounding, includes non-cash collections and expenditures

/a the Indicator changed from Growth of Loans for ODCs to Loans of Universal/ Commercial Banks as the BSP revised their series. Loans of U/KB is Gross of RRP
The old series covered all Other Depository Corporations that included, apart from universal/commercial banks, thrift banks and rural banks.

/b based on Depository Corporations Survey

/c (2006=100)

/d expanded electronics coverage which includes semi-conductors, electronic data processing, office equipment, consumer electronics, telecommunication, communication/radar, control and instrumentation, medical/industrial instrumentation and automotive electronics.

/e net of non-budgetary accounts

/f starting April 2005, LFS adopts the new definition of unemployment

Updated by: MEAD-NPPS

Source: NEDA, http://www.neda.gov.ph/econreports_dbs/Updates/PDF_WklyEcon/29%20August%202012.pdf

Figure 8. National Income Account, 2009-2011

GROSS NATIONAL INCOME AND GROSS DOMESTIC PRODUCT
AT CONSTANT 2000 PRICES
Growth Rates

	2009				FY	2010				FY	2011				FY 2
	Q1	Q2	Q3	Q4	2009	Q1	Q2	Q3	Q4	2010	Q1	Q2	Q3	Q4	
GROSS NATIONAL INCOME	6.2	7.6	6.2	4.4	6.1	11.5	9.2	6.9	5.6	8.2	3.3	1.5	2.1	3.5	2.
GROSS DOMESTIC PRODUCT	1.0	1.6	0.5	1.4	1.1	8.4	8.9	7.3	6.1	7.6	4.6	3.1	3.6	3.7	3.
Net Primary Income	26.5	31.7	28.1	15.5	25.0	21.2	10.0	5.7	3.9	10.0	(0.5)	(3.4)	(2.5)	2.9	-0
By Expenditure															
1. Household Final Consumption Expenditure	1.9	4.0	0.6	2.7	2.3	4.0	1.9	2.4	4.9	3.4	5.3	5.5	6.8	6.7	6.
2. Government Final Consumption Expenditure	5.8	11.6	12.2	14.3	10.9	21.4	7.4	(6.5)	(6.6)	4.0	(17.2)	4.3	7.1	5.8	-0
3. Capital Formation	(14.1)	(6.7)	(12.9)	(4.0)	(8.7)	31.9	38.0	34.5	25.7	31.6	42.3	(7.7)	28.0	(4.3)	11
A. Fixed Capital	(8.0)	(4.0)	(0.6)	5.8	(1.7)	18.9	26.6	15.4	15.7	19.5	12.7	(9.9)	3.3	5.2	2.
1. Construction	5.0	9.4	(3.6)	(3.8)	1.6	11.4	25.2	17.1	14.0	17.5	7.4	(21.0)	(8.0)	11.4	-4
Public	4.5	32.9	21.3	5.7	(1.3)	9.7	27.0	(23.4)	(13.7)	4.1	(37.9)	(58.1)	(19.0)	49.4	(25
Private	5.1	(4.7)	(11.9)	(7.0)	8.2	11.9	23.7	35.7	24.6	24.1	22.0	10.9	(5.2)	1.4	6.
2. Durable Equipment	(17.1)	(17.2)	1.2	16.9	(4.9)	29.2	35.9	17.6	21.6	25.5	18.7	1.0	13.4	1.2	8.
3. Breeding Stock & Orchard Devt	(2.4)	(6.6)	0.7	(3.1)	(3.0)	(0.2)	1.0	(0.3)	0.7	0.3	0.3	0.7	0.8	(2.2)	(0
B. Changes in Inventories	(21.8)	(21.5)	(64.7)	(35.4)	(262.8)	26.4	56.5	38.4	78.2	101.5	173.0	61.8	148.9	(36.7)	690
C. Intellectual Property Products	(4.5)	4.2	13.8	24.3	10.5	14.2	4.1	(1.1)	(0.7)	2.9	3.5	9.0	9.1	20.2	10
4. Exports	(7.7)	(11.6)	(7.3)	(3.7)	(7.8)	18.8	24.0	23.1	16.8	21.0	2.0	1.4	(11.9)	(5.5)	(3
A. Exports of Goods	(18.6)	(16.5)	(8.3)	0.2	(11.2)	27.1	28.6	26.6	15.3	24.7	7.0	(0.3)	(14.8)	(10.8)	(5
B. Exports of Services	41.3	13.8	(2.3)	(19.1)	8.4	(2.7)	6.2	5.5	24.3	6.5	(14.7)	9.2	5.6	18.5	3.
5. Less : Imports	(12.9)	(8.0)	(10.0)	(1.3)	(8.1)	24.2	22.1	22.1	21.9	22.5	11.3	0.4	0.4	(3.3)	1.
A. Imports of Goods	(17.0)	(9.1)	(10.6)	(2.5)	(9.8)	26.4	23.8	21.0	23.1	23.4	16.9	1.1	(2.1)	(8.0)	1.
B. Imports of Services	3.6	(2.5)	(7.0)	3.4	(0.5)	17.3	14.1	27.6	17.4	18.9	(7.8)	(3.2)	11.7	15.2	4.
By Origin															
1. Agri., Hunting, Forestry and Fishing	0.8	1.8	(0.2)	(4.2)	(0.7)	(1.8)	(2.0)	(2.0)	4.1	(0.2)	4.3	8.2	2.1	(2.5)	2.
Agriculture and Forestry	(0.0)	(0.3)	(0.2)	(5.1)	(1.7)	(1.9)	(2.1)	(3.1)	5.4	(0.1)	6.2	11.5	4.3	(2.1)	4.
Fishing	3.9	9.0	(0.3)	(0.3)	3.0	(1.1)	(1.6)	2.8	(1.4)	(0.5)	(3.1)	(2.4)	(6.6)	(4.2)	(4.
2. Industry	(2.2)	(1.8)	(5.8)	1.9	(1.9)	15.4	15.7	9.8	6.5	11.6	7.3	(2.3)	0.8	2.5	1.
Mining and Quarrying	6.2	22.4	21.1	14.2	16.1	2.4	24.4	6.8	6.9	11.4	19.8	3.0	1.7	(6.5)	4.
Manufacturing	(6.7)	(7.7)	(7.7)	2.0	(4.8)	18.3	13.2	8.4	6.5	11.2	8.8	4.7	3.5	2.2	4.
Construction	15.7	17.5	(2.8)	(0.8)	6.8	9.7	24.7	15.6	4.6	14.3	3.5	(23.3)	(8.5)	11.2	(6
Electricity, Gas and Water Supply	2.6	(2.6)	(4.1)	1.6	(0.9)	9.8	10.2	10.1	9.4	9.9	(1.2)	(3.4)	(0.7)	(6.2)	(2
3. Services	2.8	3.6	4.6	2.6	3.4	7.2	7.3	7.8	6.4	7.2	3.2	5.4	5.4	5.9	5.
Transport, Comm., Storage	5.5	1.0	(1.9)	(4.7)	(0.1)	(2.2)	2.2	3.0	1.4	1.0	4.2	4.2	4.6	2.7	3.
Trade & Repair of Motor Vehicles, Motorcycles, Personal and Household Goods	0.0	1.2	2.5	1.5	1.4	11.6	6.8	11.0	5.0	8.4	0.3	1.9	3.8	3.9	2.
Financial Intermediation	1.2	2.3	15.4	4.6	5.5	8.3	5.8	13.1	13.6	10.1	6.4	11.6	1.4	6.8	6.
Real Estate, Renting and Business Activities	5.6	3.5	1.6	6.1	4.1	5.2	8.6	6.6	9.4	7.5	6.1	6.9	8.6	9.2	7.
Other Services	3.6	7.9	8.4	6.2	6.5	9.8	10.9	4.4	8.7	8.4	5.4	5.9	7.8	7.9	6.
Public Administration and Defense; Compulsory Social Security	0.9	9.9	9.1	4.3	6.1	7.5	9.6	6.5	(0.8)	5.8	(4.6)	5.4	5.9	6.2	3.

Source: National Statistical Coordination Board
As of January 28, 2012

Source: NEDA, http://www.neda.gov.ph/econreports_dbs/NIA/GNP_GDP/nia2011fy.pdf

CORRUPTION, INSTITUTIONS, TRUST

The true 'causal' effect of corruption on economic development is not easily identified because corruption and productive endeavors that lead to economic growth themselves result from underlying incentive structures that may be incongruent. Such incentives are in turn defined by the type of institutions, or rules of the game, or rules that govern social interactions, including economic transactions (see, for instance, North 1990, 1991, 1994; Davis and North 1991; and North and Thomas 1973.) Ultimately, then, it is the 'quality' of such institutions that cause growth, and rent-seeking and corruption may only be a symptom of some 'bad' institutions.

But how do we know ex ante which institutions are good and bad for growth? Many empirical papers attempt to identify these using data on various measures of institutions and economic outcomes, e.g. income growth. This approach, however, is inherently prone to biases since there could be many institutions that jointly determine the economic outcome. If such institutions are related to each other, which is likely to be the case, then failing to include data on some of these institutions can overstate/understate the true effect of the included (institution) variables. This is because the estimated effect of the included institutions includes

the effect of the omitted ones on the outcome. In other words, if two institutions are related and each of them affects the outcome, we would not be able to disentangle the effect of one variable from the effect of the other if the latter is omitted.

Of course, various statistical/econometric techniques have been developed precisely to deal with this problem of omitted variable bias. Such techniques, however, are generally employed in order to 'safely' ignore the omitted variables. For instance, if such omitted variables are constant over some time period, one can get data on all the variables over this time period to construct a panel data to be able to net out the time-average values of all the variables. Since the time-average of a constant value (in this case the institution measure that is fixed throughout the time period) is equal to that constant value, netting out this time-average effectively removes that constant from the equation. Hence, it is 'safely' omitted. If the (institution) variable, however, is always changing over time, one can still get around omitting it if we can find a way such that it is no longer correlated with the included variable/s. This entails finding another 'instrumental' variable that can substitute for the included variable – one that is of course correlated with what it is substituting, but uncorrelated with, or exogenous to, the omitted variable.

Note, however, that while these techniques allow us to estimate the true unbiased effect of the included institution variables, the effects of the omitted institutions are ignored.[7] Short of including all the possible variables that we think are important, it is not easy empirically to identify which institutions matter most. Even if we had access to any kind of data, we still have to ex ante know which institutions we need to get data for.

However, theoretical papers can provide hypotheses on what these institutions might possibly be. More recently, Acemoglu and Robinson (2012) have shown how, throughout history, 'inclusive' economic and political institutions, rather than 'extractive' ones, lead to sustained development that is characterized by continued increases in productivity. (North, Wallis and Weingast (NWW) 2009 provide a similar analogous identification of extractive institutions as those characterizing limited access societies, while inclusive institutions are those that characterize open access, societies.) Inclusive institutions encourage agents to invest and participate in productive endeavors without fear of having the fruits appropriated by others via extractive economic and political structures. By this vein, inclusive institutions are those that protect property rights and credibly and reliably enforce contracts such that uncertainties about the profitability of investments are kept to a minimum. As Acemoglu and Robinson (and similarly, NWW) show, it is under these conditions where investments in technologies that increase productivity are encouraged and growth is sustained.

[7] Of course, one can compare the results from naïve estimations – those that do not 'control' for the omitted variables – with results from panel and instrumental-variable estimations, and the difference indicates the magnitude of the combined effects of all the omitted variables. However, if there are many omitted variables, one cannot know the individual effects of these.

This is not to say, however, that exclusive institutions are not capable of producing growth. Acemoglu and Robinson show, for instance, that by slave labor, or by exploiting natural resources, an economy can take advantage of cheap resources and generate high income. NWW also show that limited access societies that are characterized by less open markets and competition can keep growing. However, as both theory and historical evidence show, growth tapers off eventually as the sources of exploitation are exhausted.

Rent-seeking and corruption are a likely product of extractive institutions. When property rights are not clear or if commitments are not credibly enforced, agents can waste resources on attempting to define or even grab those rights, making transactions costly. Avoidance costs to get around unclear rules and establish rights over rents, such as litigation costs and bribery, can lead to substantial inefficiencies. (See the seminal work of Tullock 1967, 1971, 1975 and Krueger 1974; also Becker Murphy and Grossman 2006.) That is, it is the extractive institutions that skew the incentives of agents away from endeavoring to increase productivity and towards rent-seeking.

Note that it is inherently easier to engage in rent-seeking – that is, to grab the pie or a part thereof, rather than to increase productivity or expand the pie. This is because the benefits from the former are fully excludable (i.e. all benefits accrue to the agent that spends on rent-seeking), while the gains from the latter are only partially excludable since a larger pie benefits others as well. Thus, the individual's motivation to do the latter is inherently weaker. One can think of the decision whether to engage in rent-seeking, i.e to 'Take', or whether to invest in raising productivity, i.e to 'Make', as a Prisoner's Dilemma (PD) game, where the dominant, (Nash) equilibrium strategy for all players is to 'Take'.

Alternatively, the 'Make or Take' game can be modeled as a coordination game where both 'Make' and 'Take' are equilibrium outcomes (as in Desierto and Nye 2011). That is, if others choose 'Make' ('Take'), other players find it optimal to also choose 'Make' ('Take'). Thus, the players end up coordinating and being stuck in either a good or a bad equilibrium.

What extractive institutions and/or limited access societies do is to increase the expected gains or payoffs to rent-seeking relative to raising productivity. This, then, makes the 'Take' equilibrium more likely. In contrast, inclusive institutions that protect property rights and credibly enforce commitments make expanding the pie less costly. To put it in another way, inclusive institutions allow greater entry and competition, which puts more pressure on agents to improve productivity. Extractive institutions, on the other hand, hinder competition and limits access to resources and markets to select 'elites'.

Thus, rent-seeking and corruption are symptoms of extractive institutions, and not necessarily the cause of slow growth and development. It is tempting to attempt to cure the symptom since institutions are such a broad concept whereas corruption can be more easily measured and assessed. However, from the framework of

Acemoglu and Robinson, and NWW, we now acknowledge that the types of institutions that ultimately matter for sustained growth and development are those that protect property rights, ensure credible commitments and promote stable environments, such that ex ante investments in productivity are justified by ex post returns. Such requirements are so important that it is even possible for productivity to increase even if other 'symptoms' that many have come to use as institutional variables/indicators are bad. For instance, Pritchett (2003) argues that it is 'institutional uncertainty' that is of paramount importance, and that there can be certainty even amidst corrupt environments. De Dios and Ducanes (2012) show that among countries in Asia, corruption is not necessarily detrimental in some stages of growth, while Desierto and Ducanes (2012) show that for the Philippines, contract enforcement appears to have had a larger, more significant effect on FDI than bureaucratic inefficiencies or even corruption.

The potential problem in focusing on anti-corruption efforts is that the manner by which it is conducted might harm stability, property rights and contract enforcement. Specifically, the cancellation by the current administration of allegedly anomalous contracts might be seen to contribute to an uncertain environment and the fragility of contracts and property rights in general.[8] In fact, while the overall Economic Freedom Index of the Philippines has increased by 0.9 points in 2012, neither the Freedom from Corruption nor the Property Rights components of the index improved. While regulatory efficiency has increased, openness of markets has not improved and Trade Freedom even decreased.

On the other hand, one can argue that the current anti-corruption efforts, while disruptive in the short term, can help create a better, more inclusive set of institutions in the future. That is, such efforts might have spurred what Acemoglu and Robinson call a 'critical juncture', providing impetus for institutions to evolve.[9] Thus, it may be difficult to assess the likelihood of success in promoting sustained growth without considering the long run evolution of property rights and extent of credible commitment and stability.

There may be other indirect measures of the inclusiveness of institutions, which may be easier to ascertain while in the short run period and while institutions are still evolving. A promising notion in the literature is the effect of trust on growth. Another way of looking at how inclusive institutions promote growth is to realize that what makes property rights and credibility and stability of environments

---

[8] Matters can also get complicated for longer-term contracts that span several administrations and bureaucracies (e.g. the Ninoy Aquino International Airport (NAIA) terminal 3), as it may be hard to disentangle 'clean' and enforceable components from anomalous elements.

[9] Acemoglu and Robinson, however, show that critical junctures may also lead to more extractive institutions. For instance, the Black Death was a critical juncture for both Eastern and Western Europe but it led to the development of more extractive institutions in the former but more inclusive institutions in the latter. The current anti-corruption efforts in the Philippines can easily lead to more extractive institutions if, for instance, they are seen to be partisan and induce retaliation by injured parties.

encourage productive endeavors is that they enable agents to trust that they can receive and retain the payoffs from such investments. Hence, in the absence of reliable measures of inclusive institutions, one can assess the level of trust of individuals in society.

Of course, the notion of trust itself may be difficult to measure. A common metric used in the literature is to directly ask respondents if they feel that "most people can be trusted" of if they feel that "you can't be too careful dealing with people" (see Glaeser et al. 2000 for a review of the literature.) While such a measure may seem broad and subjective, it is reasonable to believe that, provided the respondent answers truthfully, she will act according to her belief, and that her general feeling of trust extends to most interactions, including economic transactions. Such survey-based measures of trust may then be sufficiently suitable proxies for actual trust.

One other alternative is to observe how subjects behave and see if the behavior reveals that she is trusting or not, which is essentially what experiment-based studies on trust do. One possibility is to let subject play games, such as the PD, in various contexts, where the choice of defecting (in our institutions example, the 'Take' strategy) is interpreted as being less trusting while the choice of cooperating (in our example, the 'Make' strategy) reveals that the subject is more trusting (see, e.g., Al-Ubaydlii, Jones and Weil 2011a, and Jones 2008). Other games are designed to also look at 'trustworthiness' as well, e.g. trust games in which a player decides how much money to send another who decides how much to give back in response (see, e.g, Al-Ubaydlii et al. 2012.)[10]

However, regardless of which measure to use – survey-based or experiment-based, it is still not clear what the exact relationship of trust and institutions is. Is it that inclusive institutions foster trust, or that trust creates better institutions, or is it even that both institutions and trust are simultaneously determined by other factors? Zak and Knack (2001) show that the effect of trust on growth varies depending on the type of social, economic and institutional environment. Zak and Keefer (1997) also show how trust correlates with growth and institutions, but without testing for the possibility that institutions feed back to trust. To date, no coherent theory explains the interactions among trust, institutions and economic outcomes, nor identifies what determines trust (see Farrell and Knight 2003.)

One important complicating factor is that trust appears to be also affected by human capital. (See, e.g. Putterman et al. 2010, Al-Ubaydlii, Jones and Weil 2011a, 2011b, and Jones 2008.) The inherent problem with determining whether human capital affects trust is the possibility that human capital may itself be correlated with various social, economic and institutional factors that simultaneously affect trust (see Coleman 1998). Inclusive institutions, in particular, may make it easier for an individual to establish and maintain various social networks. Such networks increase

[10] Still another way to measure trust that is based on observed behavior but not experimental is to see the extent of one's social networks. (See, for instance, Zak and Keefer 1997 and Glaeser et al. 2000.)

her level of trust, while the individual human capital of each of the members of the network can spill over among other members, thereby accelerating the accumulation of one's human capital and improvements in productivity. Without controlling for this simultaneous correlation between institutions and trust and between institutions and human capital, one may over/understate the true effect of human capital on trust. (Recall the omitted variable problem.)

It is also important to disentangle the effects of human capital on trust from the effects of institutions in order to ascertain which types of policy interventions are likely to increase trust more. Human capital accumulation entails continuous investments in health and education over the long term, and in this sense, appears costly. However, the alternative of producing inclusive institutions can be costly and uncertain as well. Even when society is already at a critical juncture, there is no guarantee that the subsequent path would lead to inclusive institutions. The outcome depends on particular underlying conditions and the confluence of many factors that cannot easily be generalized. Acemoglu and Robinson, for instance, show how the same shock, e.g. the Black Death in Europe, or revolutions, can lead to diverse outcomes. In contrast, many studies have shown that health and education successfully raise human capital. (Of course, which types of health and education interventions matter more is a continuing subject for debate.)

In a seminal paper, Fisman and Miguel (2007) provide evidence that may be interpreted as extractive institutions having a substantial deleterious effect on trust. The authors use data on diplomatic parking tickets in New York City to show that diplomats whose home countries have higher corruption have more unpaid tickets. Flouting laws and rules is a manifestation of 'defection' in a PD game, which can thus be interpreted as an action that reveals a low level of trust. Meanwhile, corruption is an indicator or symptomatic of bad or extractive institutions. However, the study did not control for the possible effect of human capital – it could very well be that home countries with higher corruption also have relatively lower human capital, and it could be this explanation, and not corruption or institutions per se, that has generated the observed trend.

But why should human capital have any effect on trust in the first place? While experiments have shown clear correlations between trust and human capital, the theory is still unclear. One hypothesis may be that agents with higher human capital are also more patient, and thus have lower discount rates on future payoffs. Note that it has been theoretically established that in infinitely repeated PD games where agents agree to cooperate and punish defectors by defecting themselves, the 'cooperate' strategy can be sustained in equilibrium when discount rates are sufficiently low since the punishments to defectors have higher present value. If higher human capital makes one more patient, then this could explain why defection is less likely for high-human capital individuals. Indeed, Jones (2012) shows that high IQ countries have higher saving rates, which is an indicator of higher levels of patience.

Another explanation, not necessarily inconsistent with the patience hypothesis, is

that high human capital may enable one to better calculate the socially efficient strategy of cooperation (or coordinating in the 'good' Nash equilibrium strategy for coordination games). Desierto and Nye (2011) show how an infinitely repeated (coordination) game where agents decide to either uphold or flout rules/laws can generate the good 'uphold rules' equilibrium in two ways - when agents are fully rational, there should initially be enough number of players that uphold rules so as to make the initial expected payoff to upholding rules large enough for others to follow; however, when agents are boundedly rational, upholding the rules should be a 'risk-dominant' strategy for every player, which in effect can be achieved by credibly, uniformly and continuously enforcing the rules in each repeated interaction. From this model, the following testable hypothesis may be put forth. When society's overall human capital is high (which approximates full rationality), an individual with high human capital is more likely to uphold rules (that is, have higher level of trust). When overall human capital is low (which approximates the bounded-rationality environment), rules will be upheld (or trust increased) the better the enforcement of such rules.

Jones and Nye (2012) provide related evidence of this hypothesis using the same dataset Fisman and Miguel (2007) used. Although they did not obtain the diplomats' individual human capital, they had additional data on the national IQ levels as well as average years of education in the diplomats' home countries. (One can nevertheless reasonably assume that diplomats would have relatively higher human capital relative to many other citizens in their home countries.) The authors show that prior to 2002, i.e. when diplomats had immunity from being charged for unpaid parking tickets, that is when the rule was not enforced on diplomats, national IQ had a sizeable effect on unpaid parking tickets, as much as the effect of the corruption, which suggests that both human capital and institutions predict trust. (However, when average years of education is used, the effect of corruption disappears, and only education is significant.) After 2002, when the rule was enforced against diplomats, the number of unpaid parking tickets went down, and lower national IQ and higher corruption are still associated with more unpaid parking tickets, but the effects are now much smaller and even insignificant. That is, enforcement has become a better predictor of trust.

The Jones and Nye (2012) paper shows that human capital has an effect on trust that is comparable in magnitude to the effect of institutions. Note, however, that what they measure is the effect of a society's overall human capital on an individual's level of trust. In a way, since corruption and institutions also describe the social environment, their study looks at social factors that affect an individual's trust. But could an individual's trait, specifically, her human capital be an even larger predictor of trust than social influences? Nye, Androuschak, Desierto, Jones and Yudkevich (NADJY) (2012) attempt to answer this question by using data from students from Moscow and Manila on their individual human capital, proxied by test scores and grades, and their responses in survey questions on trust. To control for the effect of institutions and other social factors, NADJY use variations in individuals' heights and gender as 'instrument' for human capital. Such variables are exogenous to current institutions and social factors that affect one's current level of trust, but are shown

in the paper to be sufficiently correlated with human capital. Using such instruments, NADJY show that the effect of individual human capital may even be larger than the combined effect of institutions and other social factors on trust.

The result suggests that investments in health and education that increase human capital may be a more efficient way of increasing trust (and thereby enabling sustained economic growth and development) than attempts to 'cure' extractive institutions, including those that may effectively decrease corruption. Of course, a two-pronged approach may be taken, where more expedient methods of alleviating symptoms of extractive institutions are implemented alongside steady investments in human capital over the long run. The danger, however, is if the former is done without regard to the true characteristics of extractive institutions, i.e. weak property rights and contract enforcement, low credibility and uncertainty, which would not only undermine efforts to make institutions more inclusive, but can also decrease necessary income to fund human capital investments.

CONCLUSION

For the Philippines, the path towards sustained economic growth now appears to be within reach. What is markedly different this time is the emphasis towards institutional reform, as demonstrated by the government's unwavering efforts to enforce against corruption and increase bureaucratic and regulatory efficiency. However, the situation is fragile and it remains to be seen whether gains persist in the long run. It might be possible, for instance, that the current anti-corruption strategies, especially involving the cancellation of alleged anomalous contracts, are seen as partisan and invite retaliation in the next administrations. Even public-private partnership agreements which on the one hand speeds up key infrastructure projects, relies on the competence and benevolence of current and future administrations. To be sustainable, reform needs to be pursued by future governments with the same fervor, sincerity and direction, which may be difficult to guarantee. A better alternative may be to simultaneously invest in human capital, not only to directly increase productivity, but also in order to build trust and social capital in the long run.

REFERENCES

Al-Ubaydli, O., Houser, D., Nye, J., Paganell, M.P., and Pan, X. 2012. The Causal Effect of Market Participation on Trust: An Experimental Investigation Using Randomized Control. Working Paper. George Mason University.

Al-Ubaydli, O., Jones, G. and Weel, J. 2011a. Cognitive Ability and Cooperation in the Prisoner's Dilemma. Working paper. George Mason University

Al-Ubaydli, O., Jones, G. and Weel, J. 2011b. Patience and coordination in the repeated stag hunt. Working paper. George Mason University.

Balisacan, A., and Hill, H., eds. 2003. The Philippine Economy: Development, Policies, and Challenges. Quezon City: Ateneo de Manila University Press.

Bangko Sentral ng Pilipinas. 2012. Report on Economic and Financial Developments First Quarter 2012. Manila.

Bardhan, Pranab. 1997. Corruption and Development: A Review of Issues. Journal of Economic Literature vol. XXXV (September 1997), pp. 1320-1346.

Beck, Paul J. and Maher, Michael W. 1986. A Comparison of Bribery and Bidding in Thin Markets. Econ. Letters, vol. 20, pp. 1-5.

Becker, G.S., Murphy, K.V., and Grossman, M. 2006.The Market for Illegal Goods: The Case of Drugs. Journal of Political Economy, 114(1): 38-60.

Campos, J. Edgardo, Donald Lien, and Sanjay Pradhan. 1999 The Impact of Corruption on Investment: Predictability Matters. World Development, vol. 27 (6), pp. 1059-67.

Coleman, J.S. 1988. Social Capital in the Creation of Human Capital. The American Journal of Sociology 94, S95-S120.

David, Christina C. 2003. Agriculture, in Balisacan and Hill, eds. The Philippine Economy: Development, Policies and Challenges. Quezon City: Ateneo de Manila University Press.

Davis, L. and North, D.C. 1971. Institutional Change and American Economic Growth. Cambridge University Press, U.K.

De Dios, Emmanuel S. and Hutchcroft, Paul D. 2003. Political Economy, in Balisacan and Hill, eds. The Philippine Economy: Development, Policies and Challenges. Quezon City: Ateneo de Manila University Press.

De Dios, E.S. and Ducanes, G. 2011. Investment, Institutions and Governance in Asia. UPSE Discussion Paper 2011-7. University of the Philippines.

Desierto, D.A and Ducanes, G. 2012. Stimulating Investment and Growth in the Philippines: The Need for First-Order Market Reforms, ch. 13 in Asia Rising: Growth and Resilience in an Uncertain Global Economy, ed. Hal Hill and Ma. Socorro Gochoco-Bautista. Cheltenham: Edward Elgar.

Desierto, D.A. and Nye, J.V.C. 2011. When Do Formal Rules and Informal Norms Converge? Journal of Institutional and Theoretical Economics 167; 613-629

Nye, J.V.C., Androuschak, G., Desierto, D.A., Jones, G., and Yudkevich, M. 2012. What Determines Trust? Human Capital vs. Institutions: Evidence from Manila and Moscow. Working paper.

Esguerra, E. 2010. Job Creation: What's Labor Got to Do with It? University of the Philippines. Unpublished.

Fabella, R. 2009. CARP Without Coase: Redistributing Poverty in the Philippines. Working Paper, University of the Philippines School of Economics, Diliman, Quezon City.

Farrell, H. and Knight, J. 2003. Trust, Institutions and Institutional Change: Industrial Districts and the Social Capital Hypothesis. Politics and Society 31:4.

Fisman, R. and Miguel, E. 2007. Corruption, Norms and Legal Enforcement: Evidence from Diplomatic Parking Tickets. Journal of Political Economy 115:6, 1020-1048.

Glaeser, E., Laibson, D., Sheinkman, J. and Soutter, C. 2000. Measuring Trust. Quarterly Journal of Economics 115, 811-846.

GlobalSource Partners. 2011. Montly Report: A Bet on PPP. www.globalsourcepartners.com

Human Development Network (HDN). 2009. Philippine Human Development Report 2008/9. http://hdn.org.ph/forthcoming-philippine-human-development-report-institutions-and-politics/

Jones, G. and Nye, J.V.C. 2012. Human Capital in the Creation of Social Capital: Evidence from Diplomatic Parking Tickets. Working Paper No. 11-27. George Mason University Department of Economics.

Jones, G. 2012. Will the Intelligent Inherit the Earth? IQ and Time Preference in the Global Economy. Working Paper. George Mason University.

Jones, G. 2008. Are Smarter Groups More Cooperative? Evidence from Prisoner's Dilemma Experiments, 1959-2003. Journal of Economic Behavior and Organization, 68:3-4, 489-497.

Labonne, Julien. 2012. The Local Electoral Impacts of Conditional Cash Transfers: Evidence from a Field Experiment. CSAE Working Paper No. 2012-09. Centre for the Study of African Economies, University of Oxford.

Lien, Donald H. D. 1986. A Note on Competitive Bribery Games. Econ. Letters, vol. 22, pp. 337-41.

Knack, S. and Keefer, P. 1997. Does Social Capital Have an Economic Payoff? A Cross-Country Investigation. Quarterly Journal of Economics 12:1251-128.

Kreuger, A.O. 1974. The Political Economy of the Rent-Seeking Society. American Economic Review, vol. 64, pp. 291-303.

National Economic Development Authority (NEDA). 2011. Philippine Development Plan 2011-2016. http://www.neda.gov.ph/PDP/2011-2016/default.asp

North, D., J. Wallis, and B. Weingast. 2009. *Violence and Social Orders*. Cambridge:Cambridge University Press.

North, Douglass C., 1994. Economic Performance Through Time. American Economic Review 84: 359-69.

North, Douglass C., 1990. Institutions, Institutional Change and Economic Performance. Cambridge University Press, U.K.

North, Douglass C., 1991. Institutions. Journal of Economic Perspectives 5:1, 97-113.

North, Douglass C., and Thomas, Robert Paul, 1973. The Rise of the Western World: A New Economic History. Cambridge University Press, U.K.

Nye, John V.C. 2011. Taking Institutions Seriously: Rethinking the Political Economy of Development in the Philippines. Asian Development Review, vol. 28 no. 1, pp. 1-21.

Pritchett, Lant. 2003. A Toy Collection, a Socialist Star, and a Democratic Dud? (Growth Theory, Vietnam and the Philippines), in Dani Rodrik, ed. In Search of Prosperity. Princeton University Press.

Putterman, L., Tyran, J., and Kamei, K. 2010. Public Goods and Voting on Formal Sanction Schemes: An Experiment. Working paper. Brown University.

Rushford, G. 2012. Asia's Next Tiger. Foreign Policy.

Schiff, Maurice and Caglar Ozden, eds. 2005. International Migration, Remittances and the Brain Drain. World Bank, Palgrave Macmillan, U.K.

Shleifer, Andrei and Robert W. Vishny. 1993. Corruption. Quarterly Journal of Economics, vol 108 (August), pp. 599-618.

Tan, E.A. 2012. The Financial Crisis, Oil Price Hike, the Arab Spring and Foreign Demand for Filipino Workers. UPSE Discussion Paper No. 2012-11. University of the Philippines.

Tullock, Gordon. 1967. The Welfare Costs of Tariffs, Monopolies and Theft. Western Economic Journal, vol. 5, pp. 224-232.

Tullock, Gordon 1971. The Cost of Transfers. Kyklos, vol. 24, pp. 629-643.

Tullock, Gordon 1975. Competing for Aid. Public Choice, vol. 21, pp. 41-52.

Wei, Shang-Jin. 1997. Why is Corruption So Much More Taxing Than Tax? Arbitrariness Kills. National Bureau of Economic Research Working Paper 6255.

Woodruff, Christopher, and Rene Zenteno. 2007. Migration networks and microenterprises in Mexico. Journal of Development Economics, vol. 82, pp. 509–528.

Zak, P. and Knack, S. 2001. Trust and Growth. Economic Journal 111, 295-321.