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Has the Philippines forever lost its chance at industrialization?

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After 1870, and long before the rise of the Asian Tigers and the group of emerging economies of Brazil, Russia, India, China, and South Africa, industrial output grew fast enough in the poor periphery to achieve unconditional convergence on the industrial leaders. The Philippines was part of the group of countries that caught up during the interwar and post-war import-substitution-industrialization years. It began to deviate from the pack after the 1970s, however, leaving the group in 1982, never to re-enter it. This paper examines the possible causes of what appears to have been a unique event. These cover political instability, institutional weaknesses, liberalization policy, labor emigration, and Dutch disease. Taken together, these forces created a "perfect de-industrializing storm", It seems likely that the Philippines has forever lost its chance at industrialization.

JEL classification: F1, N7, O2
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1. Introduction

Recent research has documented industrial output growth around the poor periphery since 1870, finding evidence of impressive performance in Asia, Latin America, and the poor European periphery (Bénétrix, O'Rourke, and Williamson [2012]; de Dios and Williamson [2014]). Industrial growth accelerated in all these regions over the century between the 1870s and the 1970s, especially during the interwar decades and the post-war import-substitution-industrialization years, when the precocious early industrializers underwent a growth surge and more poor countries joined the industrial growth club. Furthermore, the majority was catching up with the three core industrial leaders—Germany, the United States, and the United Kingdom. In short, there was unconditional industrial convergence

on the leaders long before the emerging economies of Brazil, Russia, India, China, and South Africa and even before the Asian Tigers.

The Philippines was very much a part of that industrial catch-up. After extensive 19th century de-industrialization in the face of competiton from American and European manufactures (Legarda [1999]; Williamson [2011: chapter 5]), Philippine industrial growth quickened in the early 20th century. Like every other emerging industrial nation, it was led by small-scale, labor-intensive manufacturing—without much inanimate power—that first specialized in commodity processing, something that characterized the early American industrial revolution as well. Still, in the decade or so up to 1913, Philippine industrial output grew at 6.3 percent per annum, way above that achieved by the leaders, thus catching up.

Indeed, the Philippines was a regional leader, since it was the third Asian country to enter the 5 percent industrial growth club (Table 1). The following were the Asian leaders then: Japan, 1899; China, 1900; the Philippines, 1913; Taiwan, 1914; Korea, 1921; and India, 1929. The Philippines continued its industrial catch-up during the interwar years. This impressive industrial performance also obtained during the import-substitution-industrialization years 1950-1972, when Philippine industry grew at 7 percent per annum, 1.8 percent faster than the three leaders, even though the latter were undergoing a post-war growth miracle.[1]

TABLE 1. The top ten performers in Asia and the world, 1870-2009

European Periphery					
1870–1889	**1890–1913**	**1920–1938**	**1950–1972**	**1973–1989**	**1990–2007**
Bosnia	Bosnia	Russia	Albania	Cyprus	Ireland
Russia	Romania	Latvia	Bulgaria	Malta	Lithuania
Austria	Serbia	Romania	Romania	Ireland	Slovak Republic
Hungary	Finland	Finland	Yugoslavia	Bulgaria	Poland
Finland	Russia	Bulgaria	Poland	Portugal	Finland
Spain	Bulgaria	Ireland	Cyprus	Russia	Hungary
Bulgaria	Italy	Estonia	Spain	Yugoslavia	Bosnia
Italy	Australia	Hungary	Italy	Latvia	Czech Rep.
Portugal	Hungary	Greece	Russia	Italy	Belarus
	Portugal	Poland	Greece	Finland	Estonia

[1] These Philippine figures are reported in Bénétrix, O'Rourke, and Williamson [2012], and they are based on the following sources: 1902-1951: gross value added in manufacturing in 1985 pesos [Hooley 2005:480-481, Table A.1]; 1951-1960: industrial production [Mitchell 2007:368, Table D1]; and 1960-2007: manufacturing in constant pesos [World Bank 2011].

TABLE 1. The top ten performers in Asia and the world, 1870-2009 (continued)

Asia					
1870–1889	**1890–1913**	**1920–1938**	**1950–1972**	**1973–1989**	**1990–2007**
Japan	Korea	Korea	Singapore	Indonesia	Cambodia
Indonesia	China	Japan	Korea	Korea	Burma
Thailand	Philippines	China	Japan	Bhutan	Afghanistan
India	Japan	Taiwan	Malaysia	Tonga	Vietnam
	Taiwan	Philippines	Taiwan	Taiwan	China
	India	India	Pakistan	Hong Kong	Kazakhstan
	Thailand	Indonesia	Mongolia	China	Bhutan
	Indonesia	Burma	China	Maldives	Korea
	Burma	Thailand	Vietnam	Malaysia	Malaysia
			India	Thailand	Laos

Latin America and Caribbean					
1870–1889	**1890–1913**	**1920–1938**	**1950–1972**	**1973–1989**	**1990–2007**
Chile	Argentina	Colombia	Panama	St. Lucia	Trinidad & Tobago
Brazil	Peru	Peru	Puerto Rico	Grenada	Costa Rica
Argentina	Mexico	Argentina	Nicaragua	Dominica	Dominican Rep.
Uruguay	Chile	Costa Rica	Costa Rica	Paraguay	Honduras
	Uruguay	Mexico	Brazil	St. Vincent & Grenadines	Belize
	Colombia	Guatemala	Venezuela	Antigua and Barbuda	Nicaragua
	Brazil	Brazil	Mexico	Belize	El Salvador
		Uruguay	El Salvador	Puerto Rico	St. Kitts & Nevia
		Chile	Honduras	Cuba	Peru
		Cuba	Peru	Ecuador	Suriname

Middle East and North Africa					
1870–1889	**1890–1913**	**1920–1938**	**1950–1972**	**1973–1989**	**1990–2007**
Turkey	Turkey	Turkey	Iran	UAE	UAE
		Egypt	Israel	Algeria	Oman
			Saudi Arabia	Egypt	Jordan
			Algeria	Tunisia	Iran
			Turkey	Saudi Arabia	Syria
			Egypt	Syria	Yemen
			Morocco	Sudan	Egypt
			Tunisia	Turkey	Saudi Arabia
			Syria	Jordan	Sudan
				Morocco	Tunisia

TABLE 1. The top ten performers in Asia and the world, 1870-2009 (continued)

Sub-Saharan Africa					
1870–1889	**1890–1913**	**1920–1938**	**1950–1972**	**1973–1989**	**1990–2007**
		South Africa	Mozambique	Cameroon	Equatorial Guinea
		Congo, Dem. Rep	Central African Rep.	Cape Verde	Mozambique
			Kenya	Swaziland	Namibia
			Zambia	Lesotho	Uganda
			Cameroon	Botswana	Lesotho
			South Africa	Mauritius	Sierra Leone
			Botswana	Mali	Angola
			Ghana	Central African Rep.	Sao Tome &
			Senegal	Gambia	Burkina Faso
			Gambia	Congo, Rep.	Benin

While the Philippines conformed to the industrial convergence pattern, it began to deviate sharply from the pack after the 1970s. Indeed, it left the industrial catch-up club in 1982 following the country's worst post-World War II economic and political crisis. While per-capita incomes eventually recovered in the mid-1990s, the Philippines never re-entered the industrial growth club. Instead, services have served as the platform of growth for more than a quarter-century.

This premature transition from manufacturing to services is a significant puzzle. What explains this deviant manufacturing behavior after almost a century of impressive industrial growth? And if the Philippines lost its industrialization chance after the 1970s, is that chance now lost forever?

2. Understanding Philippine deviant manufacturing behavior

Since manufacturing output per employed person is simply the product of manufacturing labor productivity and the share of manufacturing in total employment, our search for explanations will start by explaining changes in manufacturing employment shares and manufacturing productivity growth. The share of industry value added in GDP remained constant at around 25 percent between 1970 and 1990, then it fell to 20 percent in the next decade. Similarly, the manufacturing employment share has stagnated at some 10 percent for more than five decades, and the industry employment share fared no better, staying essentially at around 15 percent. Thus, the classic structural shift from agriculture to industry is absent from Philippine history since the 1950s. Instead, the shift has been from agriculture to services. Without a dynamic industrial sector, the relatively slow transformation has resulted in too many poor farmers for too long, and thus too much inequality and poverty for too long: the agricultural employment share only fell below 50 percent in the early 1980s. The shift that has occurred, moreover, has been away from subsistence agriculture towards a subsistence services sector.

The link between the growth of overall labor productivity and that of manufacturing can be seen more clearly if we divide the growth in aggregate labor productivity into two components: the growth of labor productivity *within* each sector and the growth that reflects *structural change*, as labor is pulled towards sectors where productivity growth is fastest and productivity levels are highest (Kuznets [1966]; Chenery, Robinson, and Syrquin [1986]; MacMillan and Rodrik [2011]). When these components are computed for 1956-2009, we find that *within*-sector manufacturing productivity has grown fairly steadily, although not spectacularly (Figure 1).

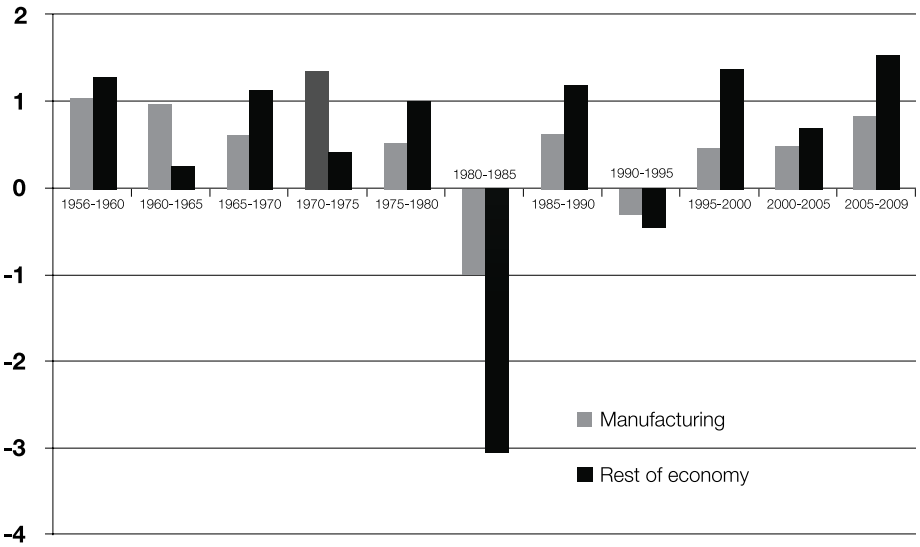

FIGURE 1. Within-sector productivity growth by sector, 1956-2009 (Annual rates, in percent)

Source of basic data: National Statistical Coordination Board (output measured in constant 1984 prices)

Two periods, 1980-1985 and 1990-1995, are the exceptions. The first coincides with the largest post-war recession the economy experienced, a combined financial and political crisis. The second relates to a less prolonged but severe power-sector crisis in 1991-1992. The steady growth of within-sector productivity in Philippine manufacturing is consistent with the documentation of Rodrik [2013] of an unconditional global convergence in manufacturing productivity. That's the good news.

The bad news is that manufacturing's productivity contribution due to structural shift has been weak, at best, and a drag on growth, at worst (Figure 2). For most sub-periods, productivity gains due to structural shift were typically negative, reflecting the secular fall in the manufacturing employment share. Between 1970 and 1985, the *structural contribution* of manufacturing productivity growth was

negative and thus failed to reinforce the effects of the 1962 devaluation. A fact relevant to any explanation of Philippine deviant industrial behavior is that the period in question was also characterized by persistent current account deficits that were financed by heavy government borrowing from external sources. These loans were used in part to finance the industrial projects of Marcos cronies. The capital intensity and inefficiency of many of these projects are a likely explanation for their weak impact on manufacturing employment and productivity. This is also reflected in the behavior of *total factor* productivity, which Hooley [1985] estimates fell throughout most of the 1970s.

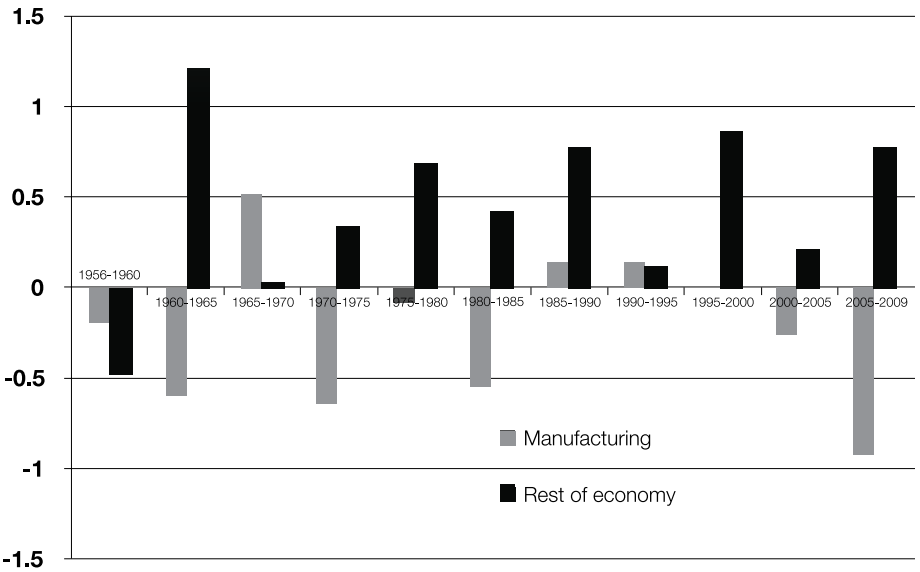

FIGURE 2. Productivity growth from structural shift by sector, 1956-2009 (Annual rates, in percent)

Source of basic data: National Statistical Coordination Board (output measured in constant 1984 prices)

There have been brief episodes in which manufacturing did contribute positively to productivity via structural shift. These occurred during incipient recoveries from preceding crises. The 1965-1970 years, for example, coincided with a revival of manufacturing following the dismantling of the system of quantitative restrictions (decontrol) in 1962. This recovery was not sustained, however, and gave way to structural productivity losses between 1970 and 1985. The same pattern is evident after the 1980-1985 crisis, when the previous positive structural shift into manufacturing was wiped out.

Why weren't these promising recoveries sustained? Four narratives have been advanced to explain parts or all of the Philippine deviant industrial behavior: the institutional story; the liberalization story; the real exchange rate story; and the overseas migration story.

2.1. The institutional story

Recent literature has trained attention on the role of political regimes and economic power (North [1990]; Acemoglu and Robinson [2012]; Engerman and Sokoloff [2012]). Moreover, the discussion in the Philippines has stressed the legitimacy of political institutions and the control of corruption [National Economic Development Authority 2011]. The main institutional hypothesis is that perennial political instability and legitimacy crises have been a major hindrance to investment and growth [de Dios 2011]. This hypothesis finds its strongest support in the turbulent years of 1983-1986, when the debt-repayments crisis combined with political instability to produce the worst post-independence recession. The 1983-1986 crisis began as a debt-repayments problem as the over-leveraged Philippine economy became caught in the pincers forged in America's Volcker recession: rising interest rates on the country's foreign loans and slumping exports (as major markets slipped into recession). Heavy debt servicing commitments necessitated a unilateral debt-payment moratorium by early 1984. The moratorium cut off the supply of imports, while the implementation of the International Monetary Fund conditionalities depressed domestic demand. Both factors precipitated huge declines in total output and employment, but industry—the most import-dependent part of the economy—was hardest hit. Industrial output fell by 19 percent between 1980 and 1985, while investment fell by 48 percent. The automotive, electronics, garment, and textile industries were affected most severely as trade credits dried up, and both home-demand and exports collapsed.

Political instability culminated in a popular revolt, which led ultimately to the overthrow of the Marcos regime. Political uncertainty did not immediately subside with the restoration of democratic rule, since there were major putsch attempts and strikes preoccupying the new government. Aside from these severe political threats, the post-Marcos government was also confronted with the problem of sorting out the ownership and operation of several dominant firms, notably food-processing conglomerates, iron and steel, drugs and chemicals, power distribution and generation, and telecommunications. Not only was political stability in doubt, so too were property rights.

Further political instability in 2000-2001, following the corruption scandal and aborted impeachment process involving the Estrada administration, led to a second popular revolt that installed the Arroyo administration. The latter, however, became embroiled in scandals involving corruption and electoral anomalies that undermined its legitimacy and gave rise to mass demonstrations and more attempted putsches. On the whole, the country fared poorly on political stability

and property rights: investor services cited the Philippines as a "high political risk" for the entire period 1984-1991. Econometric evidence suggests that the Philippine investment-ratio has been suppressed by political instability and corruption as the borrowing rate rose. In addition, corruption reduced investment demand [de Dios 2011].

The timing of political crises and institutional failure mattered. The period 1984-1991 was one of deepest political crisis, and it was also a period of large-scale relocation of Japanese manufacturing to Southeast Asia. This wave of foreign direct investment benefited Malaysia, Thailand, and Indonesia and led to the build-up of a significantly export-oriented manufacturing sector in those countries. Owing to political instability, however, Japanese, Taiwanese, and Hong Kong foreign direct investment (FDI) largely bypassed the Philippines. FDI entering Thailand during 1987-1991 was $24 billion, while only $1.6 billion entered the Philippines [Yoshihara 1994:49]. Philippine political instability relative to its neighbors explains about half of the differential in per-capita direct foreign investment for 1985-1992 [de Dios 2011:89, Table 5]). This probably accounts for much of the finding of Coxhead [2013] that the Philippines missed most of the powerful regional spillovers generated by the fast growth first of Japan and then China. The Philippines' failure to benefit from such spillovers—which effectively jump-started the industrialization of Malaysia, Thailand, and Indonesia—may in turn ultimately be attributed to the political instability that plagued the country at the worst possible time.

Investments exceeded 25 percent of GDP only during 1975-1983, the most stable years of the Marcos regime. Since then, the investment ratio has never exceeded 25 percent. While there was a predictable drop following the Asian financial crisis, a further decline took place after 2004, when the investment share in GDP fell to 20 percent or even less. These shares are very low by Asian standards.

Institutional factors must be considered one fundamental explanation for the failure of industrialization to continue after the import-substitution-industrialization period: political uncertainty and a dysfunctional government suppressed investment; import-dependent manufacturing was hit especially hard by these crises; and political instability and disputed property rights caused the country to miss out on the massive relocation of Japanese, Taiwanese, and Hong Kong manufacturing. But what the institutional narrative is unable to explain is why the structural contribution to productivity growth was already negative even before the crisis, the missed FDI opportunities, and unexploited regional spillovers. It also cannot explain why fast industrial growth did not resume after political stability returned. In any event, the ability of Southeast Asian latecomers like Vietnam, Cambodia, and Laos to adapt and to increase industrial output per capita undermines the sufficiency of the explanation. Although political instability and dysfunctional governance may explain the poor industrial performance from the 1970s to the 1990s, they cannot account for the poor industrial performance afterwards.

2.2. The trade liberalization story

The notion that trade liberalization may have caused the failure of Philippine industrialization is a long and widely held view [Bello et al. 2004]. Before the Philippine industrial slowdown, the country had maintained a pro-industry protectionist stance for some time. It began with import controls and exchange restrictions during 1949-1961 and continued with high tariffs in 1962 (Power and Sicat [1971]; Bautista, Power, et al. [1979]; Medalla, Tecson, et al. [1995]). The cascading tariff structure was maintained throughout the Marcos regime, modified only by modest concessions to new exports with tax incentives and a few export-processing enclaves. A tariff reform in 1981 cut nominal tariffs to the 10-50 percent range (from as high as 100 percent) and eased quantitative restrictions. But this reform was quickly undone by the debt crisis when quantitative restrictions were reimposed to ration foreign exchange as all trade financing dried up. After import controls were removed, the effective rate of protection for manufacturing was still about 65 percent [Bautista 2005:19].

A decisive liberalization move was taken in 1991, when the Aquino administration reduced tariffs to 3-30 percent (Table 2). The Ramos administration continued the liberalization trend and made further tariff reductions in 1998 with a stated goal of reaching a uniform 5 percent "revenue-generating" rate by 2004. While trade liberalization certainly played a role in accounting for the failure of industrialization after the early 1990s, the thesis fails to provide an explanation for the dismal industrial performance after the early 1970s, by which time the country had already dropped out from the league of high-growth performers.

TABLE 2. Average tariffs for various economic sectors (in percent)

Sector	1981	1985	1990	1991	1995	1998	2000	2001	2003
Agriculture	43.23	34.61	34.77	35.95	27.99	18.91	14.40	14.21	11.04
Mining	16.46	15.34	13.97	11.46	6.31	3.58	3.27	3.25	2.84
Manufacturing	33.74	27.09	27.49	24.61	13.96	9.36	6.91	6.68	5.43
OVERALL	34.60	27.60	27.84	25.94	15.87	10.69	7.95	7.70	6.19

Source: Philippine Tariff Commission

2.3. The real exchange rate story

What about overvaluation of the peso? Debate has periodically[2] focused on the role of the exchange rate as a developmental tool. But the debate has been further stoked by difficulties currently faced by the authorities in stemming the

[2] These policy debates flourished in the late 1970s, the early 1990s, and more recently in the present decade. (See Bautista, Power et al. [1979]; de Dios et al. [1995]; and Fabella [2011]).

nominal appreciation of the peso, as well as by a recent literature (Rodrik [2007]; Macmillan and Rodrik [2011]) which highlights the salutary growth effects of systematic real currency undervaluation in emerging economies.

Until 1970, currency overvaluation was generally associated with the import-substitution strategy, with the system being supported by foreign-exchange controls, import quotas, and tariffs [Bautista, Power, et al. 1979]. A second source of overvaluation treated in the literature has been the debt accumulation, first involving heavy public borrowing in the late Marcos regime 1974-1981 [Fabella 1996] and just prior to the Asian financial crisis 1992-1997 [de Dios et al. 1998]. Finally, remittances from overseas workers have recently emerged as a major influence on the current account and the exchange rate. Together with monetary expansion in the United States and other countries, overseas remittances have been associated with an unprecedented nominal appreciation of the peso (by some 33 percent relative to the dollar between 2004 and 2012).

Does currency overvaluation help explain the Philippine industrial failure after the early 1970s? Although the evidence cited by Rodrik [2007] lends support to undervaluation as a successful industrialization policy tool, its applicability to the Philippines is somewhat awkward, since his own data suggest that the Philippines—together with other countries in Southeast Asia—had consistently *undervalued* its currency for most of the post-war period. Figure 3 uses the data provided by Rodrik [2007] to show that the only episode of overvaluation for the Philippines (solid line) was 1950-1961, which preceded the 1962 devaluation. This result emerges partly because Rodrik applies the Balassa-Samuelson adjustment, which shifts the observed real exchange rate by an amount depending on a country's rate of growth. (The broken line in Figure 3 displays the trend in the real exchange rate without that adjustment.) Rodrik's adjusted series seems inconsistent with the fact that the Philippines has run current account deficits throughout most of the entire post-war period[3] until surpluses began to appear after 2003. It may be more constructive, therefore, to speak only of the trends of real appreciation and depreciation rather than levels.

Whether one uses the undervaluation index or the (natural logarithm of the) real exchange rate, some general trends are common: large real depreciations resulting from the 1962 devaluation and the adoption of a floating rate in 1970; a real appreciation between 1973 and 1979; another real appreciation between about 1991 and the Asian financial crisis; and significant real depreciation thereafter. Not plotted in Figure 3 is the real appreciation of the peso from around 2003 onward (Table 3). According to Rodrik's undervaluation index, the most favorable conditions for industrial development should have been the years bracketed by the 1970 peso float and the debt crisis from 1983. Yet, these are precisely the years when industrial growth rates dropped off so markedly. The real appreciation

[3] The exceptions are the years 1962-1966, 1986, and 1998.

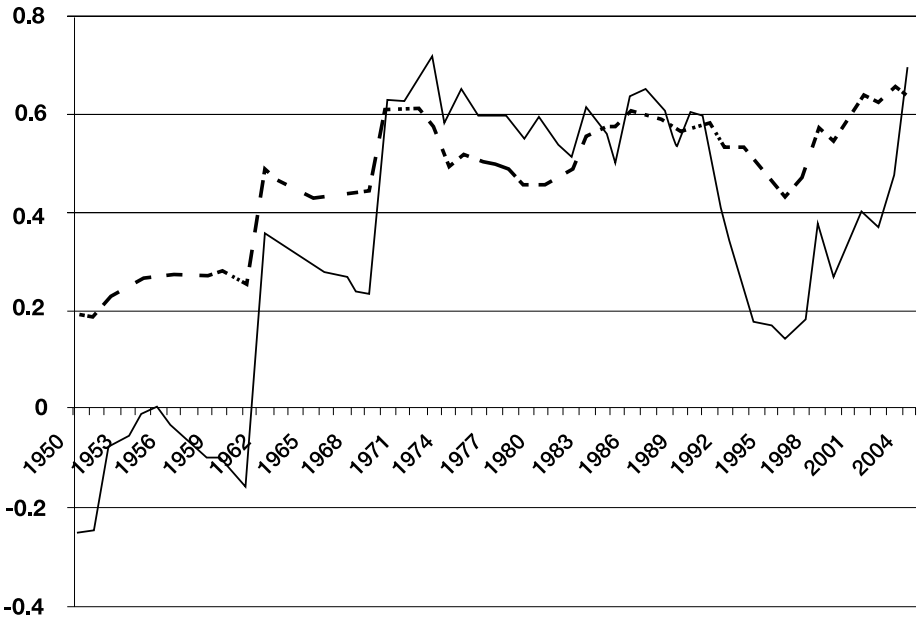

FIGURE 3. Real exchange rates and undervaluation index, 1950-2004 (in natural logarithms)

Legend: undervaluation index (solid); real exchange rate (broken)

Source: Rodrik [2007]

prior to the Asian financial crisis (1990-1995) is well understood as the result of the renewed access to foreign credit and heavy borrowing by the private sector, fueling a real estate boom as it did in other countries. In contrast, the peso appreciated in real terms between 2003 and 2010 by as much as 38 percent (Table 3). This phase coincides with the emergence of current account surpluses owing to remittances from overseas workers, as well as a rapid decline in manufacturing competitiveness and a further loss of manufacturing jobs.

TABLE 3. Indices of real effective exchange rates of the peso, 1980-2010

	1980	1985	1990	1995	2000	2003*	2005	2010
Major	99.44	89.28	66.20	79.19	71.92	59.94	61.98	84.08
Broad	101.44	100.51	86.90	100.78	109.12	99.91	101.51	137.65
Narrow	99.52	101.98	124.41	146.35	169.40	142.67	149.52	173.16

Source: Bangko Sentral ng Pilipinas
Notes: The index is based on the dollar price of a peso; a higher value of the index signifies peso appreciation.
Major index weights: US, Japan, Eurozone
Broad index weights: Singapore, South Korea, Taiwan, Malaysia, Thailand, Indonesia, Hong Kong
Narrow index weights: Indonesia, Malaysia, Thailand

In short, currency overvaluation does not by itself offer a consistent explanation for a quarter-century of deviant industrial growth in the Philippines.

2.4. The overseas migration story

As a candidate for explaining the failure of Philippine industrialization, Dutch Disease caused by overseas migrant remittances is only relevant from the early 1990s. Data on remittances are deficient before the mid-1980s, but overseas deployment, with a lag, can serve as a proxy for remittance trends. Overseas migration was a minor phenomenon prior to the early 1980s. In relation to the domestic labor force, overseas migration became significant only from 1983, when registered annual deployment shot up to more than two percent of the labor force. A further acceleration occurred in 1998, when registered deployment rose 56 percent and exceeded three percent of the labor force (Table 4, line 1). These growth spurts in overseas deployment coincided with or occurred shortly after major economic crises at home, when domestic urban employment opportunities were shrinking significantly.

TABLE 4. Deployment of overseas workers and remittances, 1975-2004 (percentage of domestic labor force; annual averages by period)

	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09
Deployment	0.48	1.70	2.02	2.65	2.75	2.96	3.44
Remittances	5.26	7.86	7.75	10.48	13.56	13.95	19.78

Sources: Philippine Overseas Employment Authority; National Statistical Coordination Board

Notes: Annual overseas deployment is a percentage of the domestic labor force. Remittances (current transfers) are a percentage of total current-account receipts. The labor force figure for 1979 is a between-year interpolation.

Increasing foreign deployment is mirrored, with a lag, by rising inward remittances by workers based overseas. A leap in remittances occurred in the late 1990s (Table 4, line 2), when they represented 14 percent of all current account receipts (from only 5 percent in the late 1970s). The figure rose further to 20 percent by the late 2000s, but the Philippines had already begun to run current-account surpluses on a regular basis as early as 2003. The upshot is that overseas remittances had only a modest impact on the current account and on exchange rates before the early 1990s. If they have generated a significant industrial Dutch Disease, they can only have done so from that time onward.[4]

[4] Another hypothesis related to migration relates to the depletion of skilled workers needed in manufacturing. Timing rules this out as a primary cause, since it is conditional on the fact of emigration was not significant until the late 1980s. However, it cannot be ruled out as an explanation of the poor industrial performance in the 2000s.

Rather, it seems more probable that the poor industrial performance especially since the mid-1980s pushed out emigrants, thus raising remittances and subsequently making the exchange rate less competitive for manufacturing. It may also be argued that once the labor force was stripped of potential new industrial workers by emigration, firms were faced with higher per unit labor costs when other conditions improved.

2.5. Real exchange rate and trade regime interactions

Policy debates in the 1960s over the trade regime were superseded after the 1990s by controversies over the exchange rate, but an explicit consideration of the two together is rarely made. Bautista [2003] is the rare exception. His most relevant point, which we schematize in Table 5, is that a failure to coordinate exchange-rate management and trade policy can lead to paradoxical or even perverse results.

TABLE 5. Trade liberalization and real depreciation

	Liberalized imports	Restricted imports and export penalties
Real depreciation	I. Demand- and supply-side constraints relaxed	II. Supply-side constraints binding
Real appreciation	III. Demand-side constraints binding	IV. Demand- and supply-side constraints binding

Source: Bautista [2003]

Episodes of currency undervaluation or real depreciation are best accompanied or preceded by a liberalization of imports (Quadrant I). The other extreme (Quadrant IV) is a restrictive import regime combined with an overvalued currency. This latter case may roughly characterize the entire import-substitution period 1949-1961 before the 1962 devaluation. This was a period when manufacturing growth ran up against a market size constraint, which consisted almost exclusively of the protected domestic market. Indeed, an expansion of manufacturing exports was stifled by the currency overvaluation. The years before the Asian financial crisis hit the Philippines in 1998 were commonly characterized by import liberalization. However, this was also a period of real currency appreciation if not outright overvaluation. Private access to foreign borrowing resumed, fueling a real estate and equity market boom, and overseas workers' remittances began to contribute a significant share (more than 10 percent) of current-account receipts. This regime falls in Quadrant III of Table 5. Import liberalization eased the input-supply constraints to manufacturing, but real appreciation undercut its competitiveness in both domestic and foreign markets. From this perspective, the observed fall-off in the structural contribution of manufacturing growth is hardly surprising.

The most enigmatic part of the historical record, however, is the decade from 1971 to 1981. These years marked the first stage of the secular collapse of Philippine manufacturing growth. As already noted, it was also a period of relative political stability (if through repression), and it included years when investment was at an unequaled high. Dutch disease from overseas migration could not have played a role during the decade, since that phenomenon only attained a significant magnitude in the 1990s. Also, the adoption of the managed float in 1970 resulted in a real depreciation that should have stimulated manufacturing and its exports. In short, many conditions were favorable for industrialization. So, what accounts for the country's poor industrial performance?

Bautista [2003] argues that this period's potential was seriously diluted by the continuing protection of importables, which raised the cost of imported inputs. His thesis finds support when one considers the effective exchange rates confronted by various tradables during the period. Export industries were still constrained on the supply side in the 1970s, given the exchange-rate penalty on producer goods (Table 6). Over that decade, a nontraditional exporting firm would have confronted a 7.6-11.4 percent foreign exchange penalty as between its final product and its essential production input. The penalty is even larger if one considers the import of "semi-essential" and "non-essential" producer goods. To be sure, a few export processing zones (Bataan, Cavite, and Mactan) and some export incentives relieved these constraints somewhat, but they were limited. The export boom in 1970-1971 was short-lived; the drive by the Marcos regime to establish "major industrial projects", including a number of heavy (capital-intensive) industries, was aborted; and the supply-constrained effort failed to generate a manufactured export takeoff. The resulting current-account deficits were covered by massive government foreign borrowings, which in turn laid the foundation for the debt crisis beginning in 1983 when global conditions became adverse. The failure of the new export industries to expand and the capital intensity of the regime's favored projects explain the weak structural impact of manufacturing during the decade (especially on employment), in spite of the higher investment ratios.

TABLE 6. Effective exchange rates for various categories of goods, 1949-1980 (period averages, pesos per dollar)

	Nominal	NEC	SEC	EC	NEP	SEP	EP	TX	NX	Ratio: EP/NX
1949	2.00	2.05	2.05	2.00	2.05	2.00	2.00	2.00	2.24	0.89
1950-1959	2.00	3.65	2.46	2.06	2.43	2.44	2.44	2.00	2.29	1.065
1960-1969	3.90	10.56	5.27	3.91	6.91	4.22	4.61	3.46	3.70	1.245
1970-1975	6.86	21.19	9.16	7.56	12.46	8.08	8.24	6.17	7.66	1.076
1976-1980	7.42	25.49	10.17	8.82	13.46	9.34	9.40	7.12	8.44	1.114

Sources: Senga [1983] for 1972-1980 and Baldwin [1975] for 1949-1971

Notes: Categories refer to the following: nonessential consumer goods (NEC); semi-essential consumer goods (SEC); essential consumer goods (EC); nonessential producer goods (NEP); semi-essential producer goods (SEP); essential producer goods (EP); traditional exports (TX); and nontraditional exports (NX).

3. Path dependence and last industrial decades

We conclude our assessment of the sources of the Philippine industrial collapse by stressing the role of path dependence. The 1983-1986 political crisis and recession shunted the economy off on a debt-driven trajectory. Helped along by a popular restoration of democracy by the 1990s, the protectionist regime, which had been the principal obstacle to industrial growth in the 1970s, was eliminated. If the global crisis had not occurred and political instability had been averted, would the regime's debt-financed industrial effort have ultimately transitioned into a typical East Asian growth pattern? Alternatively, if the Aquino government had not been beleaguered by successive putsch attempts, would the Southeast Asian flood of Japanese FDI in the 1990s have given the Philippines a second chance at an industrial future? Path dependence made it unlikely.

The widespread joblessness occasioned by poor manufacturing growth in the 1970s and 1980s gave birth to a new phenomenon that would further stifle industrial growth: the large-scale migration of overseas workers. The size and growth of this migration, and its resulting foreign remittances, would by the early 2000s resolve the foreign-exchange constraint that had been Philippine industry's other perennial nemesis. Indeed, it did more: increasing remittance inflows would generate Dutch Disease effects by the late 2000s, causing a sustained real appreciation and imposing a penalty on tradable manufacturing. If the outmigration had not occurred or had been much more modest (like the rest of Southeast Asia), would Philippine manufacturing have fared better if liberalization had been combined with a currency that was competitively depreciated after the Asian financial crisis?

The path followed has led to a new stable equilibrium where a largely liberalized trade in goods coexists with a recurrent current account surplus built on remittances and strong (skill-intensive) service-sector exports. The peso is under steady pressure to rise in real terms, which leaves little room for (lower-skill) manufacturing to compete and expand. A considerable rise in the investment rate—still low by East Asian standards—would relieve the current-account pressure for real appreciation and create more jobs. But the low investment rate may itself be part of an equilibrium where capital requirements are low simply because a significant share of the urban labor force is already abroad.

It appears that the deviant industrial behavior of the Philippines since the early 1970s was produced by a "perfect storm" of protectionist policy, political instability, missed FDI opportunities, foreign capital dependency, and financial crisis. The new equilibrium which has emerged since the 1990s suggests that the Philippines has deviated from the well-trodden industrial path to modern economic growth and is unlikely ever to find it again.

4. Questions for the future

Old World maps are of little help in *terra nova*, and the Philippines' deviation from the well-beaten East Asian industrialization path[5] means the past can offer few clues to guide future policy. Nonetheless, the Philippine government has defined a manufacturing renaissance as one of its main growth objectives [Updated Philippine Development Plan 2014], creating the expectation that a first-generation Asian Tiger story might still be in the cards. Whether this will be borne out remains to be seen.

An important question to ask is whether the conditions that led to the economy's current position will persist or ultimately reverse itself. To what extent, for example, can current trends be treated simply as a Philippine edition of Dutch disease, where booming overseas employment and outsourced business-process activities penalize the tradable manufacturing sector? It could be argued—through an appeal to path dependence—that the remittances will be with us for the long term. If so, an extended period of real currency appreciation could permanently impair the chances of any future manufacturing expansion. This would imply a need for corrective positive fiscal or monetary policy, combined with the appropriate exchange-rate regime, to moderate or even reverse the trend [Corden 2004:102-104].

Let's suppose this latter path is taken and some pro-active policy is implemented. Regardless of how deliberate currency undervaluation has worked in recent history for high-growth East Asia (as Rodrik suggests), is it still a feasible strategy for stimulating manufactured exports and industry more generally? Several complicating factors exist, such as the lower global tolerance for "currency manipulation" in the 21st century and the fact that such an action is proposed for a country already in perennial current-account surplus. Undervaluation also imposes an additional policy objective for monetary authorities, giving rise to some form of the well-known "impossible trinity." More palpable and immediate are the financial losses of central banks that must absorb the "negative carry" of accumulating low-yielding foreign-exchange denominated assets in order to tamp down real appreciation. What about fiscal expansion then? Especially if financed by domestic borrowing, fiscal expansion could help reverse the trend in principle by reducing the current surplus through greater absorption and encouraging a real depreciation. But the exchange-rate effect can be partly undone if fiscal expansion raises home interest rates and attracts inward capital flows. The latter is exacerbated for the Philippines by narrowing sovereign-risk premiums and improved credit ratings. In sum, even if deliberate undervaluation were a desired objective, the tools to engineer it are far from obvious.

[5] Fabella [2013] uses the term "development progeria" to refer to the same idiosyncratic Philippine pattern where services overtake manufacturing at an early rather than an advanced stage of development.

A larger question for the Philippines is just how much stimulus exports can still provide to manufactures today. The "rebalancing" of the Chinese economy away from exports and investment and towards domestic consumption—along with the rise in their wages and other production costs—presents opportunities for lower-wage countries to step into the breach as a new source of manufactured exports and as a destination for FDI. But how far could the Philippines benefit from this, given its high-wage status relative to countries further down the chain? Furthermore, trends such as the new "onshoring" in rich investor-countries, due to tax incentives, and the falling costs of digital and machine replacements of labor (e.g., robotics and 3-D printing) erode the edge of mass manufacture based on cheap labor. But few studies have assessed how these new conditions will affect Philippine manufacturing.Are there other policy levers that a late industrializer like the Philippines might use to expand manufacturing? Are there country-specific obstacles or penalties that keep Philippine manufacturing from attaining its potential? To what extent has formal labor protection been "overdeveloped" through wage legislation and hiring and firing practice (Esguerra [2010]). Other "structural" impediments floated in policy circles, but little researched, include low productivity and low income in agriculture, which might conceivably have raised labor costs through the impact of high food prices on nominal wages or limited domestic demand by those low rural incomes. What about the role of an inadequate infrastructure and energy bottlenecks? What about the impact of overseas migration on skilled labor supplies that might be tapped for more skill-intensive manufacturing?

Most writing about the sluggishness of Philippine growth—especially industry growth—has hitherto focused on external demand stimuli or general supply-constraints (hence the focus on exchange rates, tariffs and tax incentives, wage laws, infrastructure and energy). In contrast, few studies have explored the determinants of firm productivity in the Philippines[6] along the lines suggested by the "New New Trade Theory" [Mellitz 2008].

Finally, we need to study not only what has failed (e.g., manufacturing), but also what has succeeded and why. In particular, the growth of a highly competitive modern service sector—starting from simple call-center services and now moving into back-office support operations for foreign-based firms, accounting, and big-data analysis—has been built on a large labor-force component with better-than-average educational attainment and English-language skills, together with technological developments that have allowed "trading in tasks" (Grossman and Rossi-Hansberg [2008]; Baldwin and Robert-Nicoud [2010]). The country's competitive new services sector has been little studied, a curious situation considering the sector's impact on the accumulation

[6] An initial attempt can be found in Aldaba [2012].

of foreign exchange, skilled labor supply, the growth of a middle class, and patterns of internal demand.

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This paper draws heavily on a much longer version, which elaborates on the 1902-1950 industrial history [de Dios and Williamson 2014].

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