

The middle income trap and export-oriented industrialization in CALABARZON

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Abstract

This paper presents an attempt at bringing the idea of a ‘middle income country trap’ into dialogue with the Philippine development experience. It begins by describing the general contours of the middle income trap as an idea: its origins, its proponents, its discursive uses, and. These definitions are then compared against, firstly, empirical indicators of countries characterized as being in the ‘lower-middle income trap’ (Felipe et. al., 2012a), including the Philippines, and secondly, characterizations of Philippine industrialization found in the literature. It will forward the argument that while the Philippines may be in a middle-income trap, its situation differs in key respects from both the situations of other countries in the trap, as well as from the ideal-typical definition of the middle-income trap. To identify tentative historical and institutional explanations for the peculiar features of the Philippine middle-income ‘trap’, this paper will conclude by reconstructing the narrowness of FDI-driven, export-oriented industrialization (EOI) in CALABARZON in terms of the histories of industrialization and economic globalization in the Philippines.

Some discursive observations about the ‘middle income trap’

In the literature that has emerged about the ‘middle income country trap’, its existence is typically established in contrast against countries in the ‘poverty trap’ on one hand, which have remained at a low level of income, and the handful of countries which have successfully ‘graduated’ from middle-income status to join the ranks of high-income countries. It is argued that countries which have escaped poverty through technological transfer and investment from foreign investors seeking low labor costs and the attendant productivity growth through the transfer of the labor force from agriculture to manufacturing eventually run up against hard limits. Once wages appreciate, these countries become less competitive compared with low-income countries in the low-wage game, but at the same time are unable to compete with high-income countries in higher value-added activities.

As an idea, the middle-income trap has the following characteristics. Firstly, the idea had been primarily developed in IFI and think tank circles. A 2007 World Bank report by Gill and Kharas (2012) entitled *An East Asian Renaissance: Ideas for Economic Growth* is cited as coining the term (e.g. Foxley and Stossdorf, 2011:3; The World Bank and DRCSC, 2012:12). The World Bank, the Asian Development Bank, the Carnegie Endowment for International Peace, and the Graduate Institute for Policy Studies of Japan have since used the terms in their publications, and the idea has seen some circulation in financial and mainstream media (e.g. Long, 2011; Wheatley, 2010; Villegas, 2011).

Secondly, the idea was derived from observational evidence about the performance of middle-income countries. In establishing its existence, its proponents argue, for instance, that

“only 13 out of 101 middle-income countries in 1960 transitioned to high-income status” (The World Bank and DRCSC, 2012:12). Latin America and the Middle East are held as examples of countries which saw high growth rates in the mid-20th century, but have failed to converge with high-income countries and have since been trapped in middle-income status. In this sense, the middle-income trap literature can be seen as a response to Rostowian “take-off” or “flying geese” conceptualizations of development, by arguing that high-income status is not a natural end-state of industrialization, and that there are actually limits to growth derived from technology transfer and catch-up industrialization.

Thirdly, it is typically used to justify a policy-level intervention, e.g. a “proactive industrial policy” for Vietnam (Ohno, 2010:1-3); investments in innovation and higher education for Malaysia, Thailand, and a number of Latin American and Eastern European countries (Foxley and Stosdorf, 2011:15-20); and improving technical and allocative efficiencies in China (The World Bank and DRCSC, 2012:84). This may indicate as a shift of attitudes among IFIs away from the Washington Consensus in favor of industrial policy, although a more detailed examination of this possibility is needed.

Finally, there appears to be some inconsistency amongst its proponents as to how to define the middle-income trap. Gill and Kharas (2007:17-18) simply defined the middle income trap in terms of economies of scale and factor accumulation. Subsequent usage had differed as to the definitions for ‘middle income’ and what constitutes the ‘trap’ (see table 1). In practice, this has meant that apart from Latin America and the Middle East, there appears to be no consensus as to which middle-income countries are in the trap or are not, including the two countries being analyzed for this study, the Philippines and Thailand.

Table 1. Definitions of the middle-income country trap.

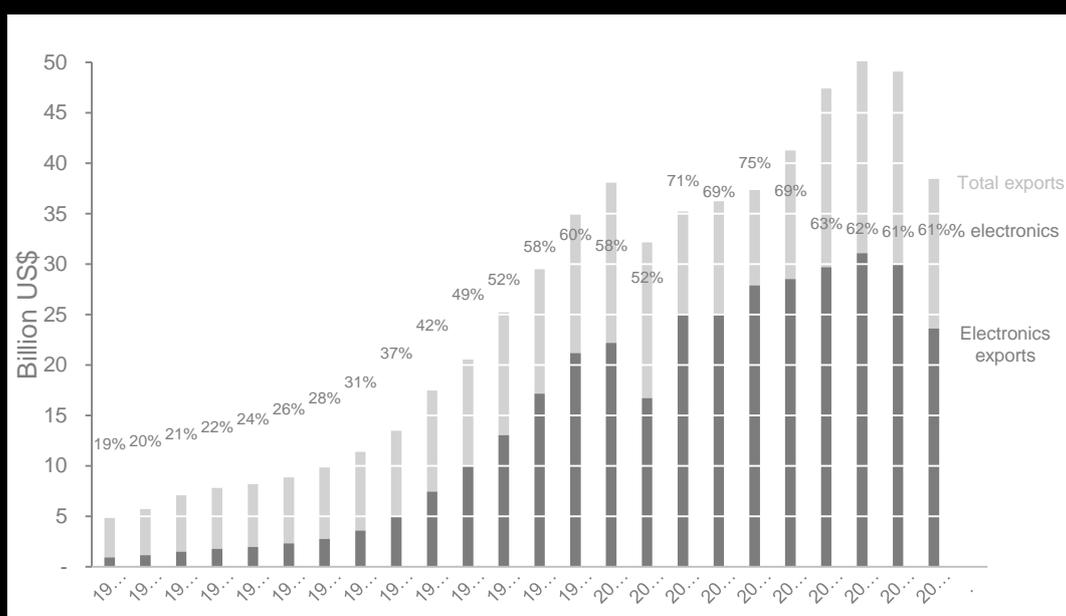
Publication	Operationalization	Examples	PH	TH
Gill and Kharas (2007)	None, but defined as follows: “in the absence of economies of scale, East Asian middle-income countries would face an uphill struggle to maintain their historically impressive growth. Strategies based on factor accumulation are likely to deliver steadily worse results, which is a natural occurrence as the marginal productivity of capital declines” (18)	Latin America and the Middle East (18)	Unclear	Unclear
Felipe et. al. (2012)	If a country’s per capita income in 1990 PPP dollars remains between \$2,000 and \$7,250 for 28 years, then it is in a lower-middle income trap. If a country’s per capita income remains between \$7,250 and \$11,750 for 14 years, then it is in a higher-middle income trap. The periods were determined by the median number of years that countries which have successfully	Lower-middle income trap: Albania Algeria Bolivia Botswana Brazil Colombia Congo, Rep. Dominican Republic	Yes; lower- middle income trap	No

	graduated to the next step have taken. (1)	Ecuador Egypt El Salvador Gabon Guatemala Iran Jamaica Jordan Lebanon Libya Morocco Namibia Panama Paraguay Peru Philippines Romania South Africa Sri Lanka Swaziland Tunisia Yemen		
Foxley and Sossdorf (2011)	“We have defined middle-income countries as those whose PPP per capita income (in constant 2008 dollars) is \$8,000 to \$23,000” (29). No operational definition is provided; a list of countries which are ‘likely candidates’ for falling into the trap is drawn from the literature (5)	Latvia, Malaysia, Mexico, Thailand (4)	No	Yes
Izvorzki (2011) Ohno (2010)	“Depending on the amount of [natural resources, foreign investment, and foreign aid], a country may rise to a low, middle or high income level with little effort but will eventually get stuck in that income category if it fails to build a national mindset and institutions that encourage constant upgrading of its human capital...If the country has moderate advantages in resources and geography initially, it will likely be caught in the middle income trap.” (1)	Malaysia, Thailand, Indonesia, Philippines	Yes? Yes	Yes? Yes
WB and DRCSC (2012)	If a country’s per capita income relative to the US is between ~1.75 and ~3.9 in both 1960 and in 2010, then it is in the middle-income trap (12)	Latin America and the Middle East; 88 out of 101 middle-income countries in 1960 (12).	Yes?	Yes?

Characterizing the Philippine 'trap'

Going by the definition of Felipe et. al. (2012), the Philippines, having been a lower-middle income country since 1976, is in the lower-middle income trap. Other indicators seem to support this assessment. It has a narrow export profile, with electronics consistently accounting for over 60% of its total exports over the past decade (see figure 1). These exports are positioned rather low on the value chain, with operations concentrated in assembly and testing (McKay, 2006:47-51). The same could be said about motor vehicle parts, the second-largest export product in terms of volume: the majority of exports are in low value-added sub-assemblies, such as wiring harnesses (source). Its garments export sector is facing competition from lower-cost countries such as Bangladesh, Cambodia, and Vietnam, and can now be considered a 'past-prime' apparel exporting country (Gereffi and Frederick, 2010:169). Finally, the Philippines had recently been beset by high-profile shutdowns of exporters, with Intel having shuttered its factory in 2009, and Ford ceasing the local assembly of its models, and consequently its export operations, at the end of 2012 (Narag, 2009; Adriano, 2012).

Figure 1. Electronics as a proportion of total Philippine exports, 1986-2009.¹



However, a comparison with other countries in the lower-middle income trap indicates that the Philippines may be in a qualitatively different situation. Within this group, it has among the highest levels of manufacturing GVA as a percentage of GDP, as well as manufactures as a percentage of total merchandise exports (see figures 2 and 3). These levels have *More in common with what kind of countries? HMIT? East Asia?* However, its level of industrial employment and income per capita are among the lowest in the LMIT group (see [figures 4 and 5](#)).

What about competitiveness rankings

¹ NSCB, various years.

Further complicating the picture is dissonance between the ‘middle income trap’ diagnosis—i.e., that countries in this trap have exhausted the potential for growth through low-wage, FDI-driven, export-oriented industrialization—and how Philippine manufacturing has been characterized in the literature.

Firstly, the Philippines did not transition out of the poverty trap through rapid export-oriented industrialization. The literature characterizes its manufacturing as having been stagnant for the past 50 years (citation, citation, citation). **Early lead, initially strong ISI but was unable to leverage this success to export markets. Consequently, as shown in figure 2, the share of manufacturing has been relatively steady at around 25% from 1960, and has in fact declined over the past decade to 20%.**

Secondly, instead of running up against the limits of labor-intensive growth, the key issue for export-oriented industrialization in the Philippines is its inability to replicate its success in electronics in other product groups: **compared against East and Southeast Asian countries** (Hill, 2003:233). **Usui**

Furthermore, labor costs do not seem to be a major concern for the export-oriented industries in the country. For electronics locators, it is the high cost of power and the quality of infrastructure which *what?* (65-70). For motor vehicle parts and automobile assemblers, it’s economies of scale.

Finally:

Overall, the Philippine situation opens more questions for the idea of a ‘middle income trap’ than the middle income trap provides answers for the Philippine situation. Firstly, it opens the possibility that there are different and path-dependent developmental traps at the middle-income level, which its literature may have insufficiently problematized.

Export-oriented industrialization in CALABARZON

Characterizing export-oriented industrialization in the Philippines may partially account for how and why its middle income trap differs from those experienced by other countries. Narrowness, or Across varied aspects of Philippine EOI

Narrowness in terms of product groups

Narrowness in terms of inter-industry links,

Narrow in terms of geography,

In terms of employment

In terms of domestic capital participation

Firstly,

1. Philippine EOI in many respects is about CALA EZs.

- 1.1. From 2002 to the present, between 16%-18% of total manufacturing GVA is CALABARZON, but 45% of all merchandise exports and 51% of all manufactured exports of the Philippines come from CALABAR EZs,
 - 1.1.1. % for electronics
 - 1.1.2. % for wiring harnesses
 - 1.1.3. % for garments
 - 1.1.4. Describe exports data from PEZA: what is the exports mix? Also, from literature: how high/low on the value chain?
- 1.2. See Ch. 2 for a more substantive discussion of how this came about.
2. Very narrow export profile
 - 2.1.1. Usui
 - 2.1.2. Tracking the middle income country trap
3. Foreign-dominated. Limited participation of domestic capital in export industries. Neither hacenderos nor taipans participated.
4. Low value-added industrialization, with little domestic content.
 - 4.1. Describe NX data from PEZA.
5. Highest-volume sectors have minimal impact on the overall employment picture, with electronics and BPO both accounting for only 1% of employment.
 - 5.1. Total employment in CALA EZs.
 - 5.2. Electronics: McKay.

Taken in historic perspective, these characteristics of Philippine EOI can be explained in terms of the sectorally- and geographically-uneven character of both industrialization and export development in the Philippines. Prior to embarking on the EOI path, the Philippines has had a history of both manufacturing as well as of exporting.

- 5.3. Prior to this the Philippines had a history of manufacturing as well as of cash crop and mineral exports.
 - 5.3.1. Cash crops:
 - 5.3.1.1. Sugar (Negros, Pampanga, Laguna, Tarlac). Involved landowning classes.
 - 5.3.1.2. Coffee (Batangas)
 - 5.3.1.3. Coconut
 - 5.3.1.4. Pineapple and Banana (Mindanao). Foreign (US) capital, from Commonwealth period onward.
 - 5.3.1.5. Allied industries: e.g. liquor, centrales. Copra processing.
 - 5.3.1.6. Associated capitalists: Sorianos,
 - 5.3.1.7. Check "Sugar and the Origins of Modern Philippine Society."
 - 5.3.2. Import-substitution industrialization
 - 5.3.2.1. Concentrated in Manila, but SLEX corridor and the 50-km industrial exclusion zone set up by Marcos in 1973.
 - 5.3.2.2. Mix of domestic and US (under parity rights) players. See Yoshihara, see Balisacan and Hill.
 - 5.3.2.2.1. Domestic operations of US firms: Coca-Cola, Nestle, (70s), Goodyear, Ford

- 5.3.2.2.2. The beginning of a pattern:
- 5.3.2.2.3. Transition from cash crops to import-substitution industrialization: Yulos and Canlubang. Fil-Syn, Asian Transmission http://www.joseyulo.com/?page_id=23
- 5.3.2.3. Relatively well-developed domestic industry, except: review Hutchcroft, Balisacan and Hill.
- 5.3.2.4. Except: dependent on domestic consumption as well as foreign inputs(?)

However, Philippine EOI was unable to build upon previous phases of capitalist accumulation and formation.

Shift from 'traditional' (cash crops and resources-based) to electronics, garments, etc. starting with (when).

Little continuity between each successive period of industrialization, and consequently capitalist formation.

Sugar→ISI: minimal. HUTCHCROFT SAYS SOMETHING ABOUT THIS. ISI guys were mostly taipans. Cash crop guys were content with their arrangement and didn't really diversify into ISI. Is this a fair assessment?

ISI→EOI: ang layo sa capabilities nila eh! ISI products couldn't really compete internationally(?) and did not readily figure into the needs of locators.

Sugar→EOI?

Precursors: Gelmart. Did not involve domestic capital (see Hutchcroft, McKay p.56).

Military role

There are, however, some exceptions. Earlier phases were present in CALABARZON but little connect between cash crops→ISI→EOI. See: Norgate, Asian Transmission. Exceptions: IMI of Ayalas. Asian Transmission. Gateway. Lopez and solar

CALABARZON's middle income trap

- 5.4. The image of an economy pushing the limits of low-wage, FDI-driven and export-oriented industrialization is perhaps more apt for CALABARZON as a region.
- 5.5. Escaping the middle-income trap: overcoming narrowness, industrial diversification.
- 5.6. Philippine trap looks like more like a failure of EOI rather than the exhaustion of EOI. Do the indicators tell this story?
- 6. Conclusions
 - 6.1. The Philippines isn't neatly described by the idea of a 'middle-income country trap'. However, if considered a separate economy, CALABARZON.

6.2. CALABA industrialization should be understood as the spatial expression of a specific period of industrialization which has little connections to nor continuity with past periods of industrialization. Different markets, involved different factions of capital, and had different spatial patterns. In the parlance of the PRODY guys, this product was poorly-connected in the Philippine product space. It's sophisticated for its level of wealth, but that's because it's an enclave industry.

6.2.1. Implications for the project:

6.2.1.1. Export-oriented manufacturing in CALABARZON is dominated by foreign firms. Their Philippine operations might not have the decision-making power vis-à-vis moving up the value chain. But this is also a deliberate design choice on the part of Annette, I presume?

6.2.1.2. The involvement of domestic capital in export-oriented manufacturing is largely limited to EZ development, owing to constitutional limitation on land ownership by foreigners.

6.2.1.2.1. Does declaration of single buildings eg SMPIC necessitates partnership with Filipinos?

6.2.1.3. What is likely important is the development of export products which are a.) more connected in the product space, and b.) involve higher levels of employment and domestic capital—in other words, developing export markets and/or a comparative advantage for the SME sector. See East Asian renaissance: p. 108-109. Philippines is regional exception in developing new products.

-Cavite EPZ: established when?

-Canlubang: industrial estate established as a consequence of exclusion zone?

When did Marcos declare the 50-km exclusion zone? 1973 (Balisacan and Hill 357)

Military role (Hutchcroft)

Under Marcos, there was some attempts to break oligarchies. But Marcos did not make a fundamental shift away from patrimonialism of the past. Marcos pursued a contradictory but politically-savvy strategy: limited export platform to please foreign investors and development agencies while maintaining a highly protectioneist domestic economy and coercive state to fend off rivals and enrich himself and his closest allies.

Unlike South Korea and Taiwan, the Philippines did not connect enclaves to broader, more comprehensive industrialization plan to promote local industry and spur competitive, indigenous firms. Because of clientelist character of the government, intervention in the economy was often inefficient or unproductive.

Kinds of state-business relations in CALABARZON

Notes on Philippine exports

- 1.) Highest-volume sectors are low on their respective value chains, particularly BPO and electronics. Apparel: not sure.
- 2.) Higher-value manufacturing sectors, particularly processed foods, automobiles, have limited exports. The reasons for this likely differ across sectors.
 - a. Universal Robina's establishment of factories elsewhere in Southeast Asia (FDI instead of exporting from Filipino factories) should prove to be insightful. Hypothetically: Filipino capital would rather engage in domestic intensification into protected and/or fixed sectors eg real estate, infrastructure, energy generation, retail or foreign investment rather than engage in export-oriented manufacturing.

Notes on the electronics manufacturing industry and allied industries

- 1.) MNCs dominate exports in electronics.
 - a. Important to look at the role of domestic capital in electronics export. Does domestic capital participate in the high-volume export sectors, particularly electronics and apparel? Why/why not?
 - b. SMEs in electronics-2005-2007 PEDP
- 2.)

IMI: engaged in R&D.

Emerson is engaged in R&D.