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The Middle-Income Trap: More Politics than Economics

Richard Doner
Emory University
rdoner@emory.edu

Ben Ross Schneider
MIT
brs@mit.edu

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Abstract. Economists have identified the existence of a middle income trap but have yet to analyze, much less theorize, the politics of this trap. We argue that the trap has two core components. First, the policies necessary to upgrade productivity -- as in human capital and innovation -- require enormous investment in institutional capacity. Second, these institutional challenges come just at the time when political capacity for building these institutions is weak due primarily to the fragmentation of potential support coalitions. Politics in particular are stalled by fractured social groups, especially business and labor, and inequality generally. These conditions resulted in large measure from previous trajectories of growth. The empirical analysis concentrates on nine larger MI countries.

I. Introduction¹

Since the mid- 2000s, economists, in both academia and development multilaterals, have drawn increasing attention to the Middle-Income (MI) Trap, especially in Southeast Asia and Latin America.² These writings have been valuable in identifying and defining the trap, in

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² The first reference to the concept seems to have been in Gill and Kharas (2007: 17-18). Subsequent papers, especially by World Bank and IMF economists, focused on defining the trap

exploring its proximate sources (especially productivity slowdowns), in recommending policy remedies (such as improvements in human capital), and in highlighting the importance of broad political coalitions required to implement such remedies. However, existing analyses do not explain precisely why this is a trap. If experts and leaders are aware of the weaknesses of their economies, if they can identify the policies required to improve productivity, and if they recognize the need for broad support and engagement, why has it been so difficult to move forward? One answer to this puzzle is that today's middle-income economies are different from their predecessors. And yet, in their survey of the debate, Aiyar et al. (2013: 13) conclude that "there is virtually no theory about why and how middle-income economies may be different."

In our view, the absence of such a theory reflects the neglect of the political economy bases of the middle-income trap. Specifically, existing analyses fail to address the ways in which the growth trajectories of today's middle-income countries have weakened the institutional and coalitional bases for the very institutions and policies required to move beyond middle-income status. To address this considerable gap, we argue for a deeper appreciation of the challenges inherent in upgrading³ policies, of the institutions required to address these challenges and, most critically, of the political obstacles to developing such institutions. Our argument takes seriously the meaning of "trap" as a path dependent outcome resulting from prior trajectories of development.

(Agenor & Canuto 2012, World Bank 2012, Felipe 2012, Eichengreen et al. 2013). Regional specialists quickly picked up on the idea, first in Asia (e.g., Yusuf and Nabeshima 2009; Ohno 2009) and then in Latin America (e.g., Paus 2014, Foxley and Sossdorf 2011), and Turkey (Yeldan et al. 2013). For skeptical views, see Summers and Pritchett, and Bulman et al. (2014).

³ By upgrading we refer to the production of goods and services with increasing value added, domestic linkages, and sustained productivity growth.

Among those writing on the middle-income trap, most agree on defining it as an extensive period of middle-income limbo, especially in contrast with earlier developers. The numbers are stark. Of 101 middle-income economies in 1960, only 13 had graduated to high income (HI) by 2008 (World Bank 2012: 12). Today's middle-income countries are caught in a developmental nutcracker: "unable to compete with low-income, low-wage economies in manufactured exports and unable to compete with advanced economies in high-skill innovations...." (Kharas and Kohli 2011: 282). There is also agreement that the trap reflects a slowdown in productivity growth as economies exhaust the gains from moving into middle-income status based on diversification into new sectors via shifts of workers from agriculture to manufacturing, mobilization of capital, and reliance on foreign technology.⁴

The emphasis on the need for productivity growth translates into broad agreement among economists on many of the policies needed to get out of MI trap. These include more and better education (especially higher and technical), greater savings and better investment, better infrastructure, and more innovation and R&D.⁵ Views diverge on whether targeted industrial policies should be added to the mix (Paus 2014), but this does not detract from consensus on the list of policies above. Nor is there disagreement on the need for institutional strengthening, especially better administrative capacity to deliver public services and economic regulation.

⁴ "...a drop in TFP growth...(accounts)... for about 85 percent, or 3 percentage points, of the absolute reduction in the growth rate of GDP per capita" (Agenor and Canuto 2012: 3-4, citing Eichengreen et al. 2011). See also Aiyar et al. (2013: 7-8). On the growth limits of diversification, see Imbs and Warciagi (2003).

⁵ For authors emphasizing one or more of these policy solutions, see Agenor and Canuto (2012), Lee (2014), Lin and Treichel (2012), Aiyar et al. (2013), Paus (2014), and Eichengreen et al. (2013). Some authors bring in other issues including weak property rights, rigid labor regulation (Aiyar et al. 2013: 16-17), corruption, and shallow financial systems (Gill and Kharas 2007).

Finally, although rarely a primary focus, most studies of the MI trap – often drawing on the experiences of late comers such as South Korea, Singapore, Finland, and Ireland – recognize the need for some minimal political requisites for enacting necessary policies (e.g., Foxley and Sossdoff 2011, Devlin and Morguillansky 2011). These include political will, long time horizons on the part of political leaders, broad societal consensus, business-government collaboration, and some degree of inclusive politics (Flechtner and Panther 2015).

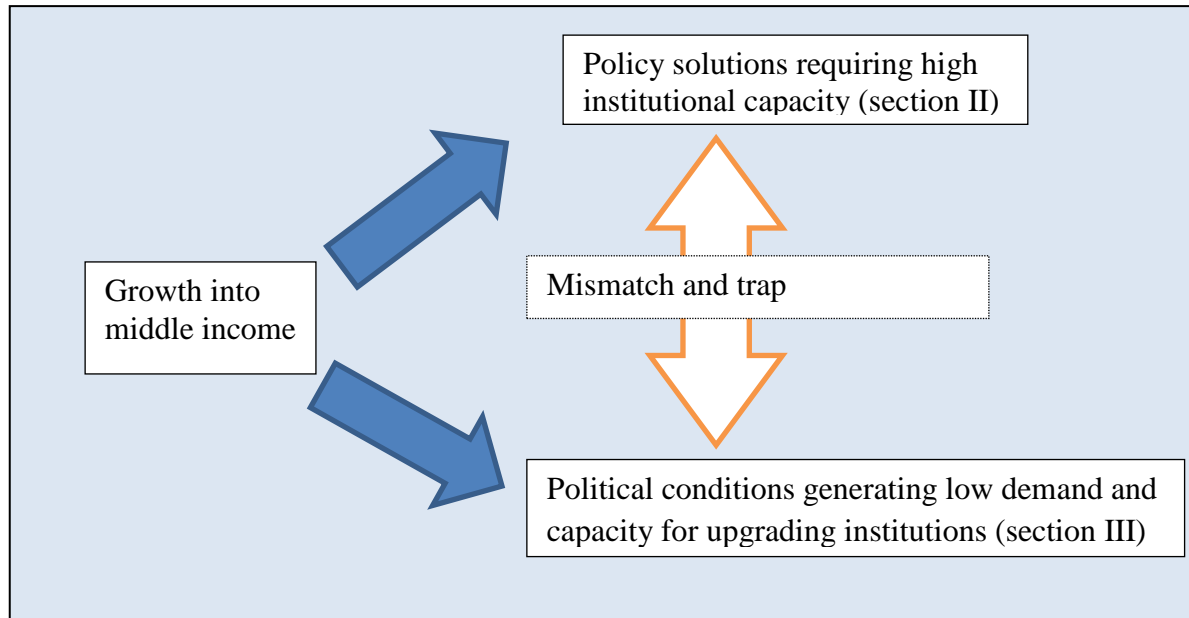
Beyond these areas of agreement, the scholarship on the MI trap leaves serious gaps. A first is the lack of systematic attention to the difficulties inherent in the prescribed policies. Measures designed to improve local technological capacities, such as vocational training, R&D, or standards and testing, are in crucial ways much more challenging than many of the earlier investment-driven growth policies focused largely on the accumulation and mobilization of capital that helped countries move out of low to MI status (Aiyar 2013: 32). Subsequent upgrading policies to get beyond MI and closer to technological frontiers, take more time to implement, require the participation of more numerous actors (e.g. teachers, trainers), and demand more technical and site-specific information than do reforms that can be accomplished by the “stroke of a pen” (for a review, see Doner 2009). These features “demand” more sophisticated institutional arrangements (Hanson 2014). Moreover, as discussed below, graduating to HI in the 21st century is more difficult than it was in the 20th.

Most central to this article is the lack of attention to institutional origins. Few ask what would motivate key actors to coordinate. Why would self-interested political and economic elites expend scarce resources to construct the complex institutions required to implement initiatives in areas such as technical education and R&D? Which groups are most likely to lead demands for upgrading and related institutions? Who are the likely coalition partners? *Are*

politics - reflected in relations among key societal actors - in MI countries in fact less amenable to building the consensus economists advocate than were politics in other stages or trajectories of development?

Our answer to this last question is affirmative. Today's middle-income countries have "grown into trouble" (Temple 2003). The conditions that facilitated or accompanied their ascension to MI status -- such as foreign investment, low-skilled and low-paid workers, inequality, and informality -- over time generated cleavages that impede upgrading policies and building the institutions necessary to implement them.⁶ What makes it a trap -- and not just a transitional condition or a "regression to the mean" (Pritchett and Summers 2014) -- is the institution-intensive nature of the required policy solutions (noted earlier), combined with weak societal demand for such institutions. Figure 1 offers a graphic guide.

⁶ Two kinds of path dependent arguments can be made on the transition from LI to MI. The first is that factors such as inequality, FDI, and informality accompanied and did not impede the transition, and then became obstacles to moving to HI. The second is that these factors in fact facilitated the particular trajectory of growth into MI. In this paper we stick with the weaker first formulation. The second is plausible, but beyond the scope of this paper.

Figure 1. Political Economy of the Middle Income Trap

The main political obstacle to institution building is the fragmentation of social groups, especially business and labor, and the resulting absence of strong pro upgrading coalitions. Growth trajectories on the way to MI status fractured the groups – especially business and labor – that are the core potential constituencies for a big leap coalition. In roughest terms, big business is split between foreign and domestic firms, labor is divided between formal and informal sectors, and societies overall are riven by high equality. These cleavages splinter interests and make coalition building more difficult.

These arguments reflect an expansion of our comparative lens beyond the small number of developmental states that successfully made the leap from MI to high income status -- especially countries like Korea, Taiwan, Singapore, and Finland -- to those countries that have *not* made the leap. Much of the scholarship on the success cases concentrated on the institutions of developmental states such as their professionalized, Weberian bureaucracies, “pilot” agencies,

and close business-government collaboration. But this scholarship was limited by the range of institutions it addressed and, most critically, by a neglect of coalitional underpinnings (but see Kohli 2004). Focusing on the countries that have *not* made the leap alerts us the underlying structural obstacles to the broad coalitions needed for institution building. As such, the implications of our arguments thus go beyond the study of the MI trap to address the shortcomings of what has become an apolitical institutionalist hegemony in development studies and practice (for a summary, see Rodrik 2007).

The article proceeds as follows: Section II examines the significant institutional challenges facing MI countries through the examples of human capital and investment in R&D. Section III turns to the socio-political obstacles to addressing these and other institutional challenges by exploring social cleavages, especially those created by inequality, FDI, and informality. Section IV illustrates the fractious interests of groups in MI politics in the crucial case of education reform. Section V then broadens the comparative analysis (including China) and concludes with some practical and theoretical implications. Most of the empirical material throughout the paper focuses on comparisons between MI and HI countries in the 21st century. Where data are available, we include some comparisons to past experiences of earlier graduates to HI, especially to show that earlier graduates did not face the same challenges and cleavages as today's MI countries.⁷

⁷ Further historical comparisons have limited value as the challenges of graduating to HI have fundamentally changed in the 21st century. A fuller comparative analysis would also include a section comparing transitions from LI to MI with transitions from MI to HI. Our primary focus here is on the latter transition.

II. The Institutional Challenges of Today's Middle Income Trap

The upgrading reforms required to move out of middle-income status are difficult and complex, especially compared to simpler reforms by fiat (e.g., devaluation or raising interest rates). Because of their complexities, implementing such reforms requires institutions to coordinate, to monitor and reconcile the interests of multiple actors, and to help provide specialized information. Such institutions operate at multiple levels, ranging from overall sectoral coordinating institutes and public-private consultative councils, to judicial offices for effective contract enforcement and patent protection, to agencies specializing in areas such as innovation financing, testing and standards, R&D promotion, and vocational training. Creating such institutions is difficult because they require both (horizontal) coordination among state agencies, among firms, and between public and private actors, and (vertical) coordination of numerous providers, such as highly trained researchers, judges, teachers, curriculum developers, and test engineers, each of whom plays important roles in long implementation chains.

Moreover, the challenges are greater now than in the 20th century when countries graduated to HI with lower levels of education and R&D. In education, for example, the average years of school in the adult population was eight for countries that graduated to HI in 1960s and 1970s (Europe, Anglo settler countries, and Japan) and 8.4 for countries that graduated in the 1980s and 1990s (Barro and Lee 2010; Felipe et al. 2012). The average in our nine large countries in MI limbo was already 8.8 years by 2010, while the average for all advanced countries in 2010 had risen to 11 years.⁸

⁸ For these calculations, we rely on Felipe et al. (2012) who estimate when advanced countries made the transition to HI. For the World Bank study cited at the outset, all HI countries in the first wave were already high income by 1960. Both studies agree on the countries that graduated in the late 20th century. See appendix, tables 5 and 6.

This section focuses on two such institution-intensive reform areas essential to increasing productivity: education (human capital) and investment in R&D. These are, for good reason, usually at the top of the policy priorities identified by economic studies of the MI trap.⁹ The scatterplots (see Figures 2 and 3 below) also give a good indication that education and innovation are less crucial to the transition from LI to MI (there is no tight or simple linear connection with income), and that today's large MI countries are well below the line (levels now expected at their income).

Most importantly, these policy areas also illustrate clearly the huge institutional hurdles facing countries seeking to exit MI limbo. Our goal in this section is not to attempt to identify a short list of reforms that might solve the MI trap (and other scholars have recommended a host of other policy prescriptions), but rather to show the depth of the trap and the major institution building necessary to get out of it. For brevity, we concentrate on education and R&D, but the framework applies to a range of other policy areas including legal and financial systems that are similarly institution intensive.

The empirical analysis covers large upper-MI countries of Latin America (Brazil, Mexico, Argentina, Colombia, and Peru), Southeast Asia (Thailand and Malaysia), South Africa, and Turkey.¹⁰ Excluding China, these nine countries account for 2/3 of all the people living in

⁹ Moreover among characteristics correlated with income (such as financial development or governance indicators on rule of law), education and R&D-driven innovation more clearly precede productivity growth, both logically and empirically (Hanusheck and Woessman 2012).

¹⁰ These 9 countries comprise all of the larger middle income countries. From the full list of 53 countries (see appendix, table 4), we excluded countries with less than 20 million inhabitants, oil exporters, and transition economies (East Europe and former Soviet Union). We exclude petro states because of their distinctive political dynamics and transition societies because of their different development trajectories. The exceptional case of China is considered in the conclusion. For 2014, the World Bank defined upper middle income as \$4,125-12,746 GNI per

MI countries. For smaller MI countries, most of the economic characteristics are similar, but we exclude them because their policy options depend more on their larger regional trading partners. Smaller countries also have some advantages, as discussed later, in overcoming the divisions of MI politics.

II. 1. Education

Despite steady progress over recent decades in increasing access and spending, educational achievement in MI countries continues to lag. Conversely, countries where education levels have historically exceeded the norm for their income levels have been some of the fastest growing in East Asia and most likely to escape the MI trap (see Hanushek and Woessman 2012). Several measures give a clear picture of gaps in educational quality and performance: Pisa scores, proportion of the labor force with tertiary education, and number of technical workers in R&D activities (table 1). The gaps show both the problem of low human capital, but also the enormous challenge to overcoming the MI trap.¹¹

Table 1. Human capital in MI and HI countries

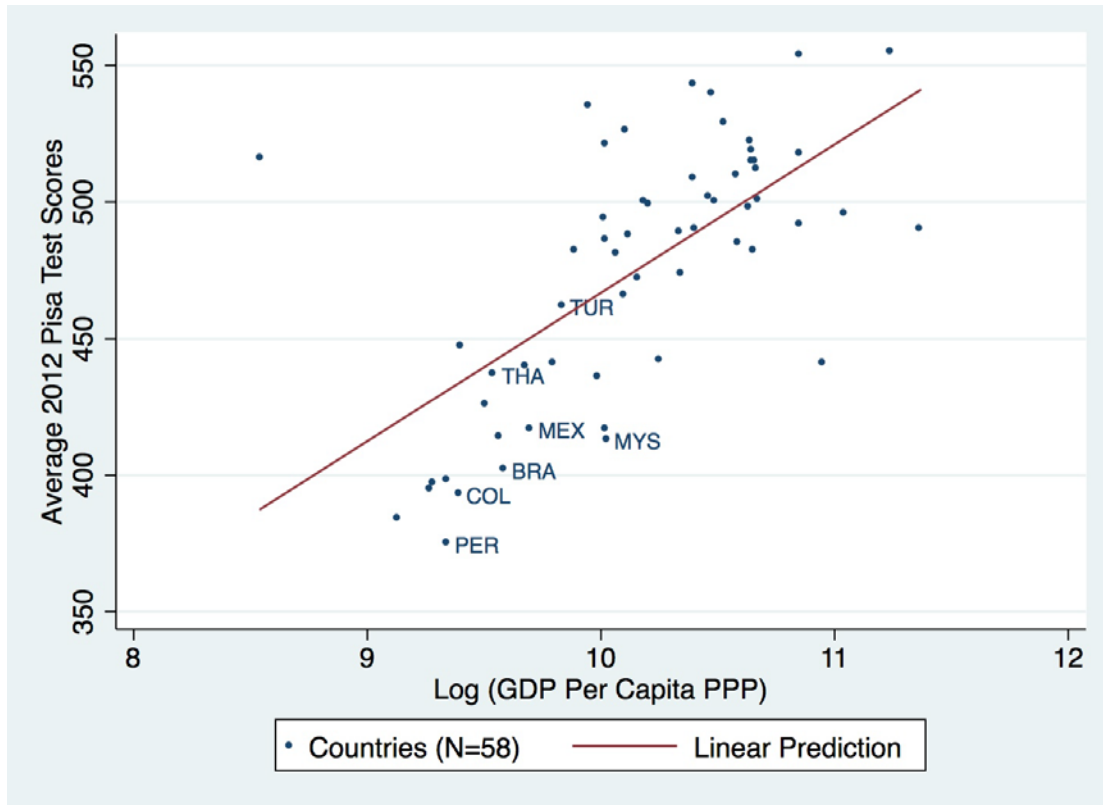
	Large middle income countries	Recent high income East Asia	High income OECD
Average Pisa scores (2012)	412	547	503
Labor force with tertiary education (2009-12)	19	34	34
R&D personnel (2009-13)	3	11	13

capita. http://data.worldbank.org/about/country-and-lending-groups#Upper_middle_income accessed 6 October 2014. The appendix provides more detail and sources.

¹¹ In addition, the proportion of vocational enrollment in secondary education is only 10 percent in large middle income countries, contrasted with 11 percent in HI Asia (15 percent without Hong Kong), and 25 percent in HI income OECD (see appendix, table 1).

Sources: see appendix, table 1. Large MI includes: Brazil, Mexico, Argentina, Colombia, Peru, Thailand, Malaysia, South Africa, and Turkey. Recent HI Asia includes: Korea, Taiwan, Singapore, and Hong Kong. HI OECD includes all OECD countries except Chile, Mexico, and Turkey.

For Pisa scores, a forty point difference is equivalent to about one year of education, which puts 15 year olds in middle income countries over two years behind OECD countries and more than three years behind HI East Asia. The results reflect cumulative learning, so raising scores requires improving education quality across all levels of primary and secondary education. Differences in the stock of higher education are again stark, with MI countries at less than 60 percent of the levels of HI East Asia and OECD. Figure 2 provides another representation of the steep institutional challenge facing large MI countries. The slope conveys the strong relationship between education and income, but also shows that education attainment in large MI countries is well below what would be expected for their income levels.

Figure 2. Pisa Scores and GDP per capita

Source: OECD (2012) and World Bank. Graph includes all countries that participated in Pisa except Shanghai [check].

Stocks at highest levels of education -- technical personnel in R&D -- show the greatest differences (Table 1); MI countries have only about a quarter of the levels of HI Asia and OECD. These numbers are of course correlated with investment in R&D (see below), but the numbers in table 1 also capture the important point that much investment in R&D goes to paying scientists, engineers, and technicians, so R&D investment cannot be increased overnight. The educational system must first produce the personnel that companies, agencies, and institutes can then hire.

II. 2. Research and Development

MI countries invest in R&D a third or less of what HI countries do (table 2). This is one of the differences most clearly connected to the prior drivers of growth -- especially low wage, labor intensive manufacturing, MNC dominance of manufacturing (MNCs concentrate R&D at home), and raw materials exports—that helped bring countries out of low income but did not promote investment in R&D. R&D does of course tend to increase with development, but Figure 3 also reveals two crucial aspects of the MI trap. First, most large MI countries are below the expected R&D investment for their income levels. And, second, for the fitted curve, MI countries are at a point in development where the curve slopes more sharply upward which conveys the increasing challenges ahead.¹²

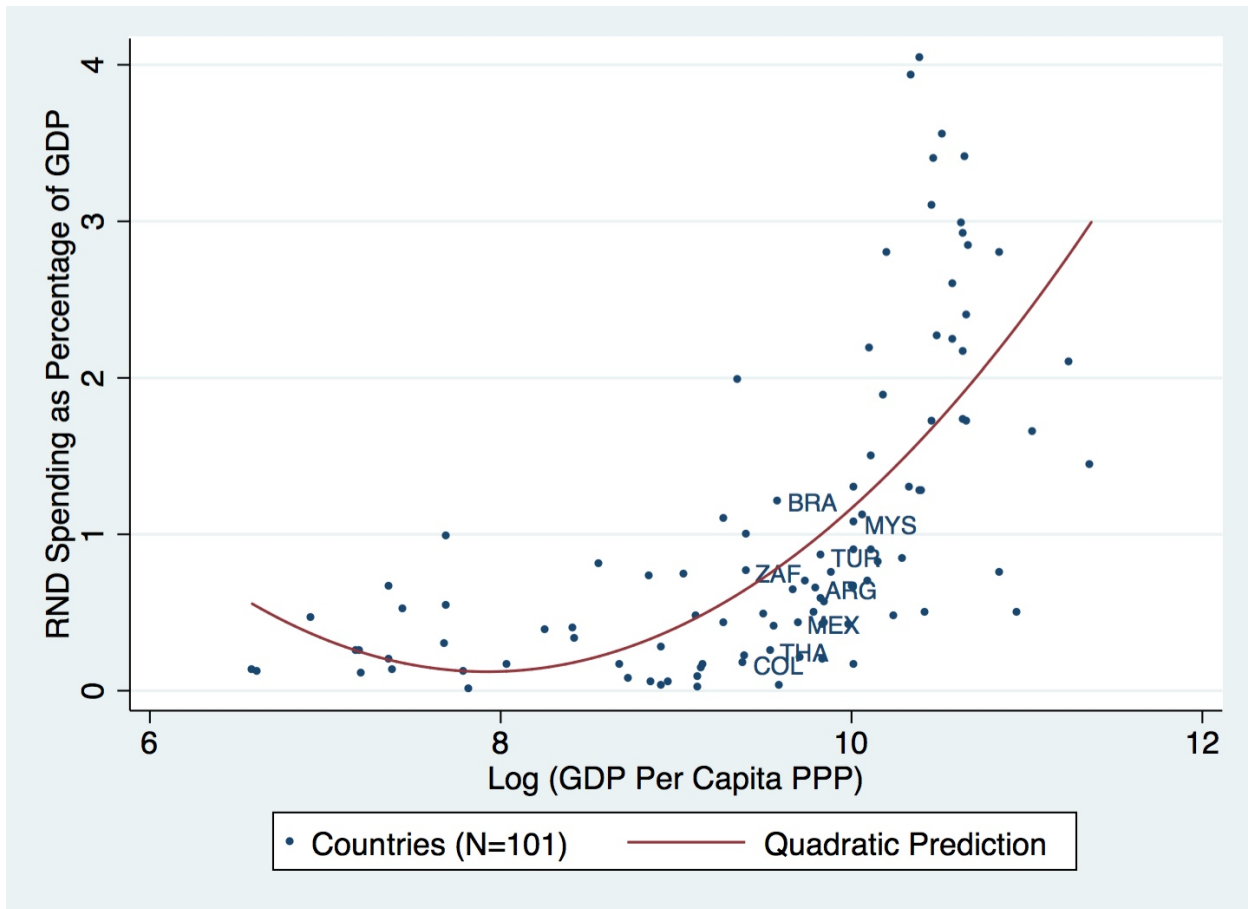
Table 2. Investment in R&D in MI and HI countries (percent of GDP)

	Large middle income countries	Recent high income East Asia	High income OECD
R&D (2009-12)	.7	2.5 (3.1)*	2.2

Sources: see appendix, table 1. *Excluding Hong Kong. For countries included, see Table 1.

¹² As with education, levels of R&D were lower at the time the first wave of countries became high income in the 1960s and 1970s. At the time of transition, average R&D as a percent of GDP was 1.3 percent (see appendix, table 6). These goal posts have moved too, though on this dimension large MI countries are, unlike in the case of education levels, behind HI countries much earlier in the 20th century.

Figure 3. R&D and GDP per capita



Source: For all income levels with available data, excluding high income petro states (Kuwait, Saudi Arabia, Oman, and Trinidad and Tobago) and financial havens (Bermuda and Macau).

The large education and R&D gaps between HI and MI countries highlight the huge challenge of institution building facing the latter. Increasing, say, investment or exports can be promoted by policies like tax exemptions that can be implemented by the stroke of a pen. Training and employing more technical personnel requires extensive horizontal coordination among private firms, research institutes, and universities who create the new positions and develop specialized curricula, as well as massive vertical coordination among the thousands of teachers and students who will implement the new training and education programs. Both forms

of coordination require large investments in a range of institutions that usually include schools, vocation training institutions, universities, university-business collaborations, and some mix of research consortia or institutes, laws and court systems for intellectual property, agencies to promote R&D, and so forth.

Improved performance by MI countries in productivity-enhancing reforms and investments is more important today when the bar for upgrading is higher than in the past. As seen, levels of education and R&D were much lower in HI countries in the 20th century than they are today. The goal posts have moved. Shifts in the technological and managerial challenges facing today's MI countries suggest that successful movement out of the MI trap in the 21st century will require different kinds of industrial policies, institutional designs, and political configurations than those adopted by earlier developers (e.g. Harrison and Rodriguez-Clare 2010). Yet one component of past success – the development of broad coalitions in support of effective institutions – is as relevant and necessary as ever.

III. Disarticulation Politics: Obstacles to Forming Upgrading Coalitions

Making enormous institutional investments requires extraordinary collective action and coalition building. Indeed, Foxley and Sossoff make it a first priority: “The most productive thing middle-income countries can do to accelerate their transition to advanced economies is to establish a bipartisan political consensus...” (2011: 2). Yet the evolving political conditions in MI countries have become especially inauspicious for such consensus and coalition building. Our political analysis concentrates on the social cleavages – especially inequality,

formal/informal workers, and foreign/domestic business -- that impede the emergence of effective upgrading coalitions.¹³

We focus on coalitions of *social groups* for two main reasons.¹⁴ First is the centrality of coalitions to successful late industrialization and movement into high income.¹⁵ Such coalitions of course varied on several dimensions such as their duration, the number of groups involved the role of the state in forging them). . They range from the “marriage of iron and rye” (large land owners and heavy industry) in 19th century Germany; to Japan’s postwar “corporatism without labor” (Pempel and Tsunekawa (1979); to Northeast Asia’s post-war “cohesive capitalist states” (Kohli 2004), also labeled “conservative coalitions” (Waldner (1999) or “state corporatism” (Wade 1990: 295) in which authoritarian leaders prioritized rapid industrialization by working “closely with industrialists”; to the more horizontal, “societal” corporatist arrangements, usually involving labor as well as business and the state, in the small states of northern Europe and Ireland (Katzenstein 1985; Ornston 2012). Despite their variation, these arrangements served a common purpose – namely, they facilitated inter-temporal bargains required for investments in upgrading-related investments that required extensive information, negotiation, monitoring and short-term costs but whose benefits would emerge only in the medium or long term.

¹³ Observers of MI countries have listed other political problems such as ethnic or religious conflict, corruption, drug trafficking, or political instability that also detract from consensus and institution building. Although often daunting, these problems are not, in our analysis, common across all nine large MI countries nor directly linked to the trajectories these countries followed from LI to MI.

¹⁴ Our focus is on coalitions of broad *social* groups including workers, business, and the middle class -- rather than strictly *political* alliances among parties or factions -- along the lines of similar conceptions in Haggard and Kaufman (2008), Huber and Stephens (2012 and earlier work), as well as much of the literature on power resource theory and varieties of capitalism.

¹⁵ In addition, strong modernizing coalitions broke the power of traditional elites in the movement from low to middle income in movements surrounding Vargas in Brazil, Ataturk in Turkey, and Cardenas in Mexico.

Second, recent anti-democratic shifts in Turkey, South Africa, and Thailand notwithstanding, long-term developmental autocracies such as those in Northeast Asia are ever less likely as democratic elections have become routine in our nine cases of large MI countries. In such democratic settings, short political horizons for political incumbents weaken their incentives for long term investments, and thus sustained political pressure from pro upgrading coalitions becomes especially important for keeping elected politicians on task.

Our core contention is that such upgrading coalitions have not emerged in today's MI countries. Owing to the ways they grew into MI status -- their reliance on various combinations of cheap labor, foreign investment, and commodity exports -- the economic elites and workers of MI countries have different compositions, cleavages, and underlying interests from those of earlier industrializers.¹⁶ Indeed, no existing scholarship we are aware of on these countries argues that such upgrading coalitions exist. We can only speculate on what such an upgrading coalition might look like in the future. Past experience in rich countries suggest that it might be cross-class among business and workers, as in northern Europe, or more elitist and more exclusively among economic elites, as in East Asia. Our goal though is not to recommend particular coalitions, but rather to examine the fissures that make any potential upgrading coalition less likely.¹⁷

The fragmentation of social groups is both vertical (high inequality) and horizontal (within business and labor). Of course, business and labor are everywhere differentiated by

¹⁶ This section focuses largely on interests which, in our formulation, can be derived from a worker's or firm's structural position in the economy. Where available, we also add in empirical evidence on expressed preferences.

¹⁷ We do not deny the potential role of policy entrepreneurs and reformers (e.g. Grindle 2004; Kosack 2012) but stress interest-based position as a necessary factor in the formation in reform coalitions.

sectoral, size, geographical, and other divisions. However, fragmentation in MI countries is both deeper than most other cases and now more consequential. The fragmentation means that firms and workers in different parts of the economy have different strategies and therefore different interests on key upgrading reforms (and a range of other policies as well), especially education as discussed in section IV.

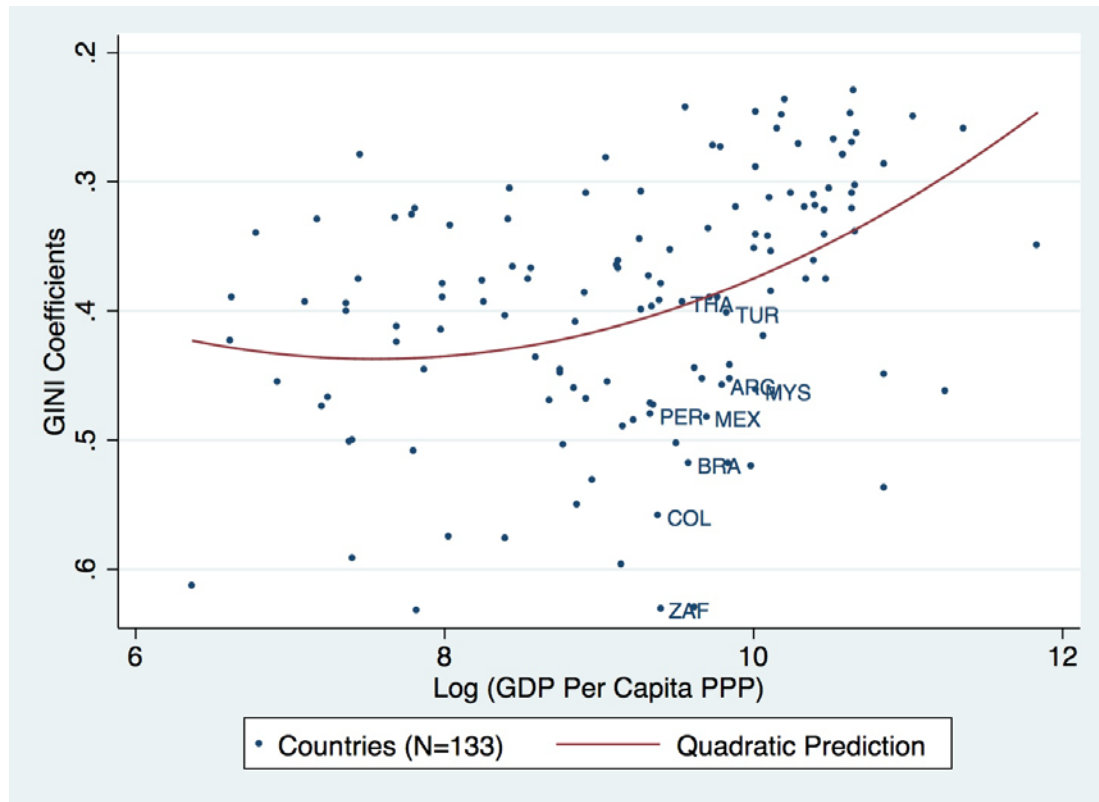
III. 1. Inequality

Inequality has risen higher and stayed higher longer in today's MI countries than in earlier industrializers (table 4). The cross sectional data in figure 4 show lower inequality in rich countries, but no real relationship between income and inequality among LI and lower MI countries (left half of the figure). On the right half of the scatterplot, the line slopes upward and shows that the large MI countries are more unequal than would have been predicted from their income. Viewed historically, many MI countries have passed the levels of GDP per capita that OECD countries had earlier in the 20th century when their inequality was falling. Over the 20th century, for pretax Gini coefficients in ten OECD countries, inequality fell steadily from .48 in 1910 to .35 in 1980 (and then rose to .39 in 2000). In contrast, Gini coefficients for five MI countries rose to above .5 in 1930 and stayed at this very high level until 2000 (van Zanden et al. 2014, 206). After 2000, inequality fell in most of the nine large MI countries, but on average only slightly, from .5 to .48 (see appendix, table 2).

Table 4. Inequality in MI and HI countries

	Large middle income countries	Recent high income East Asia	High income OECD
Gini coefficients (2005-13)	.49	.41 *(.37)	.30

Sources: see Appendix, table 1. *Excluding Hong Kong. For countries included, see Table 1.

Figure 4. Inequality and Income

Source: see appendix, table 1. Graph includes all countries with available data.

Most scholars would agree that inequality makes politics more discordant and fractious, thus discouraging the centripetal and consensual politics that Foxley and others urge on MI countries. Beyond general contention, inequality also makes MI politics vulnerable to several kinds of political dysfunction including elite capture, economic entrenchment, clientelism, and populism, all of which in various ways divert political attention away from upgrading and work against the formation of upgrading coalitions.

Most simple, two actor models of highly unequal societies start with the premise that these political economies have distinct dynamics because elites enjoy greater power and non-elites have less recourse to check that power (Acemoglu and Robinson 2006). In economic

versions of such models, elites create extractive institutions to ensure their rents even if these institutions slow growth for the economy as a whole (North 1990; Fletchner and Panther 2015). Although oversimplified, these models are useful in highlighting the pivotal role of domestic elite participation in potential upgrading coalitions and the ways in which elite privileges can discourage such engagement.

One obstacle to such participation involves a form of “entrenchment” in which longer periods in MI status allow large firms and elite social groups to consolidate their positions in the economy and the polity (Morck et al. 2005). The domestic firms -- mostly huge conglomerated family owned business groups -- that grew large in the late 20th century mostly in commodities (natural resources, basic metals and other semi processed goods), regulated sectors (especially banking and utilities), natural oligopolies (such as cement and beer), and occasionally low tech manufacturing (having been boxed out of higher tech manufacturing by MNCs) were very large and powerful coming into the 21st century.¹⁸ In contrast to business groups in countries that escaped the MI trap, these concentrated business groups have had little to gain from pushing for policies that would help their economies break out of the trap.¹⁹ Business groups have been

¹⁸ None of Thailand’s 20 richest individuals, and only two out of the 50 richest, were in manufacturing (<http://www.forbes.com/thailand-billionaires/list/#tab:overall> -- accessed June 18, 2015). For an overview on business groups, plus detailed chapter studies on nearly all nine large MI countries, see Colpan et al. 2010. Turkey is a partial exception in that more business groups had subsidiaries in manufacturing.

¹⁹ Nor, unlike firms in Taiwan and Korea, have they been under governmental pressure to do so. The more important difference for our purpose, however, is that large firms in the “graduates” were in constant flux, diversification, and vertiginous growth, so they had less time to become entrenched in any set of activities and were open to entering new sectors and leaving old ones (Amsden 1989 and Lim 2014).

entrenched both in their own traditional business strategies and entrenched in politics in the ways that they wielded power to maintain institutions favorable to their existing businesses.²⁰

Inequality also impedes upgrading policies and institutions through the more explicitly political mechanisms of clientelism and populism. Clientelism – exchanges of particularistic goods (patronage) between wealthy and poor, powerful and powerless – thrives in conditions of poverty and inequality (for a recent review Stokes et al. 2013). To the extent patronage runs through the public administration, it undermines bureaucratic capacity, encourages particularistic ties between state officials and private sector groups, and diverts resources to unproductive spending. The overall result is that clientelism undercuts programmatic politics and thereby displaces upgrading goals from partisan and electoral politics (see Keefer 2013 and Chambers 2005). The phenomenon does, of course, exist in LI countries too, but, the political effects in MI countries are more debilitating in fragmenting politics and reducing possibilities for the emergence of upgrading coalitions.

Inequality also makes politics more prone to populism, understood here in economic terms as some form of personalistic leadership that addresses broad but unorganized discontent by undertaking unsustainable redistribution through mechanisms like price controls, consumption subsidies, inflation, and exchange rate overvaluation.²¹ Among large MI countries,

²⁰ An egregious example is the Mexican billionaire Carlos Slim who, in the early 1990s, bought the government's monopoly in fixed-line telephony. Thereafter, through business associations, campaign finance, and judicial maneuvering, Slim built a political machine that resisted efforts to break up or effectively regulate his monopoly (Elizondo 2011).

²¹ Slater (2013: 742) writes about “the backbreaking inequality that makes populism so appealing.” In Thailand, Pasuk and Baker's (2008: 80) account of populism highlights the importance of a “weak and embattled” domestic capitalist class, a “small and politically marginal” formal working class, and a high percentage of the working class remaining in declining agriculture “or in the swelling urban informal sector.” For Latin America, Oxhorn

such distortions have recently been especially marked in Venezuela, Thailand, and Argentina. Recent cases vary, but economic populism encourages short-term, ad hoc policy making, antagonizes significant portions of business, and weakens rather than builds institutions. Moreover, at some point, economic populism ends badly in recession and crisis that drain away resources from policy priorities for escaping the MI trap. Although not inevitable, populism is more likely in MI countries because it draws crucial support from the urban informal sector which grew large in the transition to MI status.²²

III. 2. Informality

Following what was known as the “Lewis turning point,” earlier developers usually transited out of informality with the shift out of agriculture; urban workers quickly became formal workers whose rising wages stimulated investments in skills as the supply of surplus labor was exhausted (Lewis 1954). Historical estimates are hard to come by, but scattered evidence suggests informality was much less in earlier industrializers as they transitioned to high income in part because manufacturing accounted for a larger share than in today’s MI countries that are suffering premature de-industrialization (Rodrik 2015). For European countries, the shadow economy was about 8-12 percent in Germany in the late 1970s, 8 percent in Denmark in 1980, 3-6 percent in France in the late 1970s, 13-14 percent in Sweden in 1978, 10-27 percent in

(1998: 222) argues that “inequality and consequent heterogeneity of ... social structures has provided a fertile plain for the emergence of populism ... since the 1930s.”

²² Rodrik (2015: 26) paints a vivid picture of the political consequences of a large, enduring informal sector: “Politics looks very different when urban production is organized largely around informality, a diffuse set of small enterprises and petty services. Common interests among the non-elite are harder to define, political organization faces greater obstacles, and personalistic or ethnic identities dominate over class solidarity. Elites do not face political actors that can claim to represent the non-elites and make binding commitments on their behalf. Moreover, elites may prefer – and have the ability – to divide and rule, pursuing populism and patronage politics, and playing one set of non-elites against another.”

Spain in 1979-80, and 20-35 percent in Italy in 1979, (Schneider and Williams 2013: 75). The informal workforce in Korea was seven percent in 1993 (Rowley, Soo and Kim 2011: 66).²³

Most MI countries have been waiting a long time for Lewis' turning point and are instead characterized by a massive and relatively stable shift out of rural into *urban informality*, sometimes abetted by inflows of migrant labor (see table 5).²⁴ The shadow economies of large MI countries are nearly double those of high income countries. For a different measure, informal employment is even higher -- 44 percent -- for our large MI countries (see appendix, table 3).²⁵ Informal workers are a heterogeneous lot, but the vast majority labors in low skill, low wage, low productivity, and precarious employment (Levy 2010; World Bank 2012).

Table 5. Informality in MI and HI countries

	Large middle income countries	Recent high income East Asia	High income OECD
Shadow economy (2010)	40	22	20

Sources: see Appendix, table 1. For countries included, see Table 1. Shadow economy is percent of GDP that is not taxed or regulated.

²³ Using a somewhat different calculation, Cheng and Gereffi (1994:206) find the the size of the urban marginal class (which includes peddlers, street vendors and a variety of personal service workers) was 10.2 percent of the total labor force in 1965 and increased slightly to 11.5 percent in 1975.

²⁴ The inflow of migrant labor from LI countries into MI countries essentially postpones Lewis turning point indefinitely. Outside settler countries like United States and Australia, migrant labor does not seem to have been a factor in earlier industrializers, including HI Asia, where business had, at some point, to confront the challenge of labor shortages. Today's large MI countries are all in close geographical proximity to LI countries and lack incentives and capacity to control the flow of migrants (see, for example, World Bank 2007 on Malaysia).

²⁵ Measures of informality differ across sources. We use Schneider et al. (2010) because their estimates cover all countries for a longer period. They define the shadow economy as all untaxed and unregulated economic activity. As such, it understates informal employment because it excludes from the estimates legally registered self-employment and informal workers employed in formal firms (both counted as informal in other measures).

These high levels of informality are especially striking for having persisted *despite* growth and rising wages resulting from structural transitions from agricultural to urban services and manufacturing. In all nine large MI countries, the shadow economy actually increased from 1999 to 2007 (Schneider 2010: 45-7). Indeed, many of the sources economists identify as contributing to informality -- excessive labor market regulation, outsourcing and contract work, weak enforcement capacity, and premature deindustrialization – are not moving in directions that would reduce informality in MI countries.²⁶ Further, high levels of informality are correlated empirically with high levels of inequality (Perry 2007:13) which as just noted remained stubbornly high in large MI countries.

The informal-formal distinction constitutes a crucial cleavage within the labor force that involves, among other things, divergent policy interests (Perry et al. 2007; Sehnbruch 2006; Rodrik 2015).²⁷ For example, formal sector workers have longer job tenure and benefit from on the job training for specific skills and therefore have interests in greater subsidies for in-firm training. In contrast, informal workers shift jobs every few years so would prefer investment in vocational schools offering general training (section IV examines further interests in education). Wietzke (2015) emphasizes differing interests also in labor market policy. Outsiders with insecure work contracts prefer employment generating 'active' labor market policies, e.g. public employment centers, labor market training, subsidized employment. Insiders focus on security of their contracts, worker protection, and lower public spending on employment policies.

²⁶ For example, labor market regulations were stable or became more restrictive since the 1990s in Latin America (Carnes 2014). East Asia's labor regulations are "relatively stringent" and in some countries becoming stricter (Packard and Nguyen 2013: 54-55).

²⁷ For analyses that stress disarticulating effects of divisions among workers in contemporary Europe, see Rueda (2005) and Iversen and Soskice (2015).

Although the interest cleavages between formal and informal are often attenuated by movements of workers between sectors over time (Levy 2010), it is nonetheless rare to see organized coalitions that incorporate both insiders and outsiders.²⁸

The electoral strategies of parties and politicians can deepen these labor market cleavages and reinforce the divergence in preferences between informal and formal sector workers. For example, some parties use segmented strategies by appealing to poor voters with clientelist, individual benefits and to richer groups with programmatic appeals (Luna 2014). In essence, this segmentation allows parties to ignore the programmatic interests of the poor. At a minimum this segmentation strategy further fragments insiders and outsiders and impedes broader coalition building.²⁹ Moreover, some politicians use forbearance (non-enforcement against informal practices such as squatting and street vending) as an electoral appeal, and those in the informal sector come to view these forbearance benefits as a significant part of their perceived ‘welfare’ system (Holland 2014). Forbearance is viewed by poor voters as a better indicator of the class sympathies of candidates than are promises of traditional welfare benefits (like education), and hence further undermines possibilities for constructing a programmatic upgrading coalition. The general point is that several different strategies can incorporate informal workers into electoral politics with promises of benefits not connected to upgrading.

III. 3. Foreign Direct Investment

²⁸ Garay (2014) finds some exceptional cases of insider-outsider alliances in Latin America (especially Argentina). However, these alliances were often with public sector unions (not subject to competitive pressures) and targeted distributive welfare benefits rather than upgrading policies such as education and training.

²⁹ For Luna (2014: 63), inequality and the segmenting party strategies it encourages, make “it more difficult to craft cross-class political coalitions and develop more encompassing programmatic platforms.”

Sustained, cohesive support from a broad segment of big business is likely a necessary condition for high cost, long-term investment in upgrading institutions. However, business in most MI countries is structurally fractured on a dimension that fragments interests on key issues related to upgrading policies, such as education (section IV). The cleavage – absent in all large earlier industrializers – is between foreign and domestic firms. The stock of FDI in large MI countries is not high when compared to the high stocks in OECD countries today, but the more relevant comparison is between MI countries in the 21st century (34 percent of GDP) and HI countries in the 20th (4 percent for East Asia and 9 percent for OECD) (table 6). The average percentages would have been even lower for HI countries earlier in the 20th century when they were making the transition to HI. Moreover, MNCs are among the largest of big businesses. In Latin America they usually account for a third to half of the largest hundred firms (Schneider 2013). MNCs are especially dominant in the manufacturing sectors of many MI countries, including in our two Southeast Asian cases, Malaysia and Thailand, where they account for 34 and 31 of the top 50 manufacturing firms respectively.³⁰ This typically translates into MNC dominance of manufactured exports and contrasts with the cases of the East Asian HI “graduates, where domestic firms accounted for the majority of manufacturing exports (Cheng and Gereffi 1994: 214). At a minimum, this MNC dominance boxes the largest domestic firms out of manufacturing.

Table 6. Foreign Direct Investment (FDI) in MI and HI countries
(as percent of GDP)

³⁰ Euromoney Institutional Investor Service (EMIS):
<http://site.securities.com.proxy.library.emory.edu/php/companies/quick-screener/screener?subp=>

	Large middle income countries	Recent high income East Asia	High income OECD
Stock of FDI in 1990	9	4*	9
Stock of FDI in 2013	34	13*	58

Sources: see Appendix, table 1. *Excluding Hong Kong and Singapore. For countries included, see Table 1.

Of course, market-seeking MNCs might be amenable to joining upgrading coalitions, but these firms have technology and marketing advantages derived from home markets that protect them from domestic competitors, and they may produce exclusively for the domestic market. Because of their market advantages, they can also afford to pay workers more and poach skilled workers elsewhere, thereby also creating a private solution to the skill problem (discussed further in the next section). Efficiency-seeking MNCs operating in global production networks might have stronger interests in joining an upgrading coalition, but they also have the options of solving skill needs internally, relying on affiliated foreign suppliers, or simply moving higher value added production to a country that already has the desired skills and infrastructure.

On technology policy in particular, it is hard for foreign and domestic firms to find common ground, especially for long term, costly investments in building up the institutional infrastructure for innovation. Although some domestic firms might favor such a push, foreign firms typically do not as they do most of their R&D in their home countries (Amsden 2009). When MNCs do invest in R&D in developing countries, as they do increasingly in India and China, it is mostly the lower technology, more routinized elements of R&D. However, MNCs invest very little in R&D of any kind in large MI countries and have little interest in paying for long term costly upgrading for domestic innovation.³¹

³¹ In Malaysia, one of the MI countries with the most advanced manufacturing sectors, FDI “is neither widening nor deepening the export product mix. And FDI is not helping to significantly enhance research capacity” (Yusuf and Nabeshima 2009: 22). When MNCs have in

In terms of collective action and political engagement, MNCs are pretty deficient, as Albert Hirschman (1968) first noted decades ago. For one, MNCs regularly operate through more direct ties to relevant agencies, such as Boards of Investment and/or create separate associations, such as the ubiquitous Amchams (American Chambers of Commerce) and in particular sectors (e.g., mining in Chile or banking in Argentina).³² Moreover, some prominent associations excluded foreign firms. For example, in Mexico the exclusive CMHN (top 40 or so business groups) had no MNC members, and in Tusiad, the main association for big business in Turkey, less than ten percent of close to 600 members were from MNCs (Tusiad 2013: 84-90). In turn, governments, when establishing councils to meet with business, often exclude foreign firms (e.g., CDES in Brazil). Lastly, MNCs usually have further incentives to disengage from politics because they want to maintain a low profile (and stay out of government cross hairs), and/or because expat managers may know little about how best to engage. In sum, even were they more interested, MNCs would make for poor coalition partners.

Sensitivity to the impact of business fragmentation has been in short supply. Nearly all multilateral agencies – World Bank, IDB, OECD, Cepal, and others – have published reports on the centrality of business-government dialog and collaboration in industrial policy usually with reference to past successes in Korea, Taiwan, Singapore, and Ireland. Yet these studies say little

some countries (such as China or Brazil in the 20th century) engaged in technology transfer and more positive spillovers for domestic firms, it was the result of carrots and sticks from government and does not mean that MNCs were willing partners in potential upgrading coalitions.

³² Shadlen (2015) chronicles decades of conflicts between separate associations representing MNCs and domestic producers in pharmaceuticals in Latin America. Thai-based MNCs participate largely in foreign chambers which advocate for lowest-common-denominator policies such as stronger property rights or investment incentives. Personal communication, Pavida Pananond, 16 February 2015.

or nothing on the types of structural cleavages within the business community that might impede such collaboration (see Schneider 2015 for a review). They do not mention that foreign firms were *not* included in earlier business-government forums, except when pressured to join state-initiated coalitions as in Ireland and Singapore.³³

Many MI countries do though have sectoral success cases where narrower business coalitions pushed the creation of complex, enduring upgrading institutions. Standout cases include wine in Argentina, aquaculture in Chile, ethanol and airplanes in Brazil, and rubber-based manufactured goods and electronics in Malaysia.³⁴ Core contributors to success across these cases were international competition, perceptions of crisis, and effective state promotion, all of which fostered strong concerted business engagement in sectoral upgrading. MNCs in these sectors were conspicuous by their absence.³⁵ Overall, this combination of factors helps explain why these are more the exceptional sectors that prove the general rule of structural fragmentation.

IV. The Absence of Upgrading Coalitions in Education

Given the universal consensus on the need for more and better education, this might be the place where resistance to reform in MI politics would be easiest to overcome. Big push

³³ Some smaller firms attempting to break into global production networks (GPNs) often constitute the only source of indigenous upgrading pressure. But these firms tend to be much weaker politically than the large, business groups that have, as noted, fewer pressures and opportunities for technological improvement (on Thailand, see Pongpaichit and Baker (2008) and on Malaysia, see Tan (2014).

³⁴ For in depth case studies of some of these sectors, see McDermott 2007, Sabel et al. 2012.

³⁵ Save in Malaysia, where conditions in the key electronics-producing state of Penang resembled those of Singapore (Rasiah 2001).

education politics were also clearly evident in countries that escaped MI in the late 20th century, so historical precedents are clear (Jeong and Armer 1994; Kosack 2012). And yet, broad, effective education coalitions have not formed in MI countries. In the case of education upgrading, most large firms and workers share a lack of concern over educational performance, though the sources of their interests diverge.

To get at the institutional challenges of upgrading education, it is worth remembering that -- in growing from LI to MI -- the politics of expanding low quality, primary education are relatively simple. The costs of building schools and hiring teachers (with minimal training and salaries) are low. As school buildings and teacher employment are visible, the political benefits to local politicians are high. In contrast, rapidly improving quality in schools through 12 years of basic education requires costly upgrading to facilities, replacing ineffective teachers (often in opposition to powerful teachers unions), and training new teachers (Stein et al. 2005; Grindle 2004). Moreover, getting the right sorts of education, especially technical education, requires knowledge of the local economy, coordination with business, and ongoing curricular revision. Politicians reap few visible benefits and must manage costly distributional conflicts, especially with teachers over pay and performance. And, profound and lasting educational reform takes decades, well beyond the terms of incumbent politicians.

These costs and challenges mean that a strong, broad-based, durable coalition is required to keep upgrading reforms going, but just at the time when interests are so divergent. Under high levels of inequality, the wealthy tend to favor investments in tertiary, often non-technical education (consumption good) rather than secondary and post-secondary technical training (investment good) (Birdsall et al 1997). Moreover, the rich and the professional middle class in

most MI countries can send their children to private schools and have little interest in paying more in taxes for the education of poorer children (Kaufman and Nelson 2004).

Inequality, along with informality, also discourages poorer workers from investing their own funds in education. The costs of education (relative to their minimal disposable income) are high, as are opportunity costs (relative to employment options in the informal economy), and the returns to education for poor households are often risky.³⁶ Workers are also split over education between those in low tech, or informal jobs, that require few skills and workers in the labor elite in capital intensive firms. And although those in the labor elite have more skills, many of these were acquired on the job, so these workers have little interest in pushing to pay higher taxes to provide more schooling for others. Some evidence for the lack of interest among workers and the poor in upgrading reforms in education comes from opinion surveys across Latin America. Summarizing the findings, the IDB study thought it “rather disturbing” that 2/3 of all respondents (72 percent of poorer respondents) were satisfied with their local schools despite the clear evidence from international test scores of the shortcomings of their educational systems (Lora 2008, 15, 27).

Unified business support for investment in human capital might be sufficient to overcome this lack of common interest among consumers of education.³⁷ If a large proportion of big

³⁶ Returns to education were lower for poorer workers than richer workers in Argentina, Mexico, and Brazil and slightly higher in Thailand and Colombia (di Gropello 2006: 76-7).

³⁷ Stephen Kosack (2012) argues that, broad educational advance requires either an organized coalition of the poor or strong employer pressure. Both alone are sufficient, but arise only under specific conditions. The poor depend on political entrepreneurs to overcome barriers to collective action. Employers must operate in flexible labor markets where increasing supply of skilled workers lowers their cost (as was historically the case in Taiwan). These arguments are complementary with ours, but in our view pay too little attention to divergent interests and cleavages among workers and among firms.

businesses agreed that their long term future depended on an ever more skilled workforce, and that the cost of this education was too high for firms to bear (especially if they are in competitive international markets), and that therefore the cost had to be ‘socialized’ and borne by the government, this coalition might be able to push state actors to provide the upgrading policies and institutions. This is close to the story usually told about business support for education in Korea (Haggard and Kaufman 2008, 9-10).

The fissures within big business in MI countries make such a unified voice improbable. First, domestic firms and MNCs have different interests and capacities. Many MNCs can move their investments to other countries with more human capital, rather than invest in upgrading education. MNCs that are less mobile (either because they are investing in natural resources or in countries with large domestic markets) usually have sufficient resources to pay internally for training their, usually small, workforce.³⁸ In the rare cases of countries that made it into HI with significant FDI (Ireland, Spain, Hong Kong, and Singapore), heavy investments in education (motivated by other political considerations, discussed below) preceded rapid growth out of the MI trap. Many MNCs were in fact drawn to these countries precisely because of their high levels of education (Paus 2005).

Nor do most of the largest domestic firms have strong interests in educational upgrading. As noted earlier, most of these are firms are diversified business groups with large subsidiaries in commodities, natural resources, regulated utilities, and other services. In each of these sectors, firms need either small numbers of skilled workers in capital intensive firms that can be covered by in-house training or large numbers of less skilled workers. Service firms and others in non-

³⁸ On the lack of MNC interest in promoting education in Mexico, see Hanson (2008).

tradable sectors might have a generic interest in education, but do not feel competitive pressures from international markets to force more urgent action. In surveys of problems and needs, firms in Latin America usually do not list skills as a major issue (Pages et al. 2009: 9). Across all upper MI countries, lack of skills was not among the three most severe problems facing firms (World Bank 2012:24).³⁹ Although most business associations regularly list education as one of their policy priorities, their advocacy is in practice too feeble to support a business-led coalition that would impose the heavy costs required to upgrade education (Schneider 2013).

All this leads us to take a more skeptical view than a recent World Bank report that suggested, “political leaders can build effective pro-reform alliances of business leaders and civil society through communications campaigns that paint a compelling picture of the current failures of the education system and the importance of better education for economic competitiveness” (Bruns and Luque 2015: 48). In our view large businesses know well their skill needs which are usually low or resolved internally. It is this lack of interest, more than ignorance, that thwarts the formation of ‘effective pro-reform alliances.’

V. Comparisons and Implications

We have argued that contemporary MI countries find themselves in a trap resulting from a path dependent dynamic. The very factors that have contributed to and/or accompanied these countries’ movement into middle-income status -- such as informality, high FDI stocks, inequality, and low levels of human capital – both reinforce each other and constitute obstacles

³⁹ Domestic firms producing for GPNs would be in principle the strongest local advocates for public support for improved education. But these firms, typically medium to large size enterprises (but not among the largest), lack political weight and, facing significant technological entry barriers, often base their strategies on low cost, low skill labor (see Abonyi (2013: 57, 65) on Thailand).

to progressing out of MI. By fragmenting business and labor, they undercut the potential demand for upgrading institutions. As discussed above, these conditions contrast with earlier HI graduates that, when transitioning to HI, did not face the combined, divisive cleavages of high and persistent inequality, informality, and reliance on FDI.

Moreover, most *recent*, 2nd wave, graduates to HI status had special circumstances that helped them avoid this path dependent dynamic by overcoming the political obstacles in section III and facilitating collective action and coalition building. The 13 countries that escaped MI in the 1980s and 1990s (World Bank 2012: 12; Felipe et al. 2012) comprised three distinct groupings: East Asian countries with developmental states (Japan, Korea, Taiwan), late entrants into the European Union (EU) (Greece, Portugal, Ireland, Spain), and very small countries with populations under 8 million (Equatorial Guinea, Hong Kong, Israel, Mauritius, Puerto Rico, and Singapore). Security threats in the East Asia cases (and Israel) -- combined with contentious politics from below and a dearth of exportable natural resources -- greatly facilitated elite cohesion and coalition building (Kohli 2004; Doner et al. 2005). EU accession similarly helped forge consensus, especially among elites, and the economic benefits and direct transfers within the EU were also substantial (see, for example, Rhodes 2001; Vachudova and Hooghe 2009).

Lastly, small size can facilitate elite unity. Collective action is overall easier in countries of a few million inhabitants – and correspondingly smaller and more geographically concentrated elites – than in countries of tens or hundreds of millions. For the small countries of northern Europe, Katzenstein emphasized how smallness and a resulting sense of vulnerability fostered an ideology of social partnership, better organized social groups, and closer personal ties (as political and economic elites from different spheres all knew one another) (1985: 32-6). In smaller countries, rifts within business are less common either because foreign business is absent

(e.g., Finland) or dominant and well incorporated into a national coalition that promotes upgrading as in Singapore and Ireland (Paus 2005).⁴⁰

Some of these special circumstances may also help to explain China's rapid growth into - and probable precocious shift out of -- middle income. True, inequality increased dramatically (.47 Gini coefficient), raising debates on possible "Latin Americanization." Yet on other dimensions, China shows that it is already advancing out of MI status with lower informality (shadow economy of 12 percent), extremely high investment (49 percent), low FDI (10 percent), high R&D spending (2 percent, not far below the OECD average), and educational institutions producing large numbers of engineers and technicians, including 21 percent of secondary enrollment in technical education (see appendix, table 1). This potential for moving quickly through MI status reflects China's resemblance to earlier Asian developmental states by virtue of a clear connection for political elites between development and geopolitical status, a connection missing in other MI countries (e.g. Hsueh 2011).

This paper focused on the primary domestic cleavages among social groups that impede the coalition building required for institutional upgrading. A fuller analysis of the MI trap would also need to incorporate further analysis of state capacity and structure as well as the challenges and constraints posed by the international political economy. On the state capacity dimension, taxation is one area where MI states lag in terms of their ability to collect revenue, overall and especially in income taxes. Institution building of the sort analyzed here is costly and is likely to rely heavily on public sources, so tax capacity becomes a critical component. While coalition building is decisive, resistance by existing bureaucracies can pose additional obstacles to

⁴⁰ Ultimately, Ireland was not as successful as other small countries with "creative corporatism" (Denmark and Finland) in promoting later high technology upgrading (Ornston 2012: Ch. 5).

upgrading. It is important, for example, to understand why education bureaucracies are often large, politicized sources of rents at primary and secondary levels and fragmented at the tertiary level, while state-sponsored post-secondary vocational and technical education is fragmented and weakly related to business needs.

Our analysis of FDI and shifting development requirements of the 21st century incorporated indirectly some international factors. A fuller analysis would also need to examine in greater depth a range of issues from micro-level dynamics in GPNs to shifting international trade regimes (e.g., the limits WTO membership places on industrial policy) to the overall opportunities for expanding high value-added exports. However, the international factors that were crucial in earlier industrializers – especially geostrategic threats and economic integration – are less relevant for large MI countries. The cold war is over and countries of Latin America, Southeast Asia, South Africa, and Turkey face no immanent existential threat. Nor, is the possibility of economic integration likely to help forge domestic upgrading coalitions. If EU accession returns to the agenda in Turkey, it could have this enabling effect. Mexican integration through Nafta did draw elites together but it was around a common set of neoliberal policies rather than institutional building for upgrading.

Our analysis of the MI stall has several practical and theoretical implications. First, on the practical side, it is necessary to recognize that the policy recommendations typically proposed are difficult to implement and require institutions with significant capacity to mobilize resources and coordinate diverse interests. This phase of institutional development is not just about getting the rules right and providing broad incentives to attract capital and labor into new sectors, but more importantly about building effective organizations like schools and research centers as well as various forums where different economic agents can cultivate long term

collaborations. The neoliberal Washington consensus of the 1990s revolved primarily around a set of policies; the new more pragmatic consensus of the 2000s emphasizes institutions in industrial policy, human capital, and governance generally. This is progress, but the next step is to understand what it takes to build institutions.

Thus, a further implication of our analysis bears on institutional origins. Economists are correct that building such institutions is best understood as a contractarian process allowing interdependent actors to reap gains from trade. But, on its own, this formulation is incomplete. It fails to acknowledge that strong institutions typically emerge through the incremental interactions of a small number of large, mutually vulnerable actors (e.g. Weinthal and Jones-Luong 2004). These are precisely the conditions undermined by the structural factors or societal disarticulation – common to today’s MI countries. Indeed, although accounts of coalitional bases of prior movement into high income status do acknowledge differences within and among business and labor, the kinds of foreign-local and formal-informal splits within business and labor respectively are strikingly absent from these accounts.⁴¹

Understanding this path-dependent dynamic is all the more important in light of some important shifts in the global economy that did not confront earlier successful industrializers. Following Gerschenkron, the advance of technology and the prior industrialization of other countries changes the challenges and opportunities for the next graduates to HI. So, while 20th century industrializers could rely on relatively autarchic growth, Fordist mass production, and integrated industrial sectors, today’s would-be graduates to HI face a much more open global

⁴¹ Further, more recent scholarship on corporatism highlights the importance of prior institutional linkages – *legacies* – on which new institutions can be constructed (Ornston 2012). For today’s high-income aspirants, movement into MI status has left few arrangements easily converted to more upgrading functions.

economy characterized by rapid product cycles, intensely competitive markets, GPNs and dominant service sectors (Whittaker et al 2010). Therefore, the specific economic trajectories to HI will be different in the 21st century. However, these trajectories will still require strong institutions and enduring support coalitions to create and sustain them.

At a broader theoretical level, our analysis adopts a more structural perspective – focused on the long term evolution of social and economic groups -- against the widespread institutional consensus in development studies. Much recent debate has revolved around which institutions are the most important, often pitting liberal arguments (property rights and the rule of law) against statist alternatives (industrial policy and effective bureaucracies). However, much of this debate is premature and misplaced until we understand better what the coalitional foundations are for creating and sustaining these institutions and the structural factors that shape the potential for coalition building.

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