CATCH-UP GROWTH: Finding a Trigger¹

Shahrukh Rafi KHAN*

After heuristically explaining the social and economic process of catch-up growth, a case is made for effective government rather than 'good government'. The case is made that corruption is not necessarily a valid theory of underdevelopment. After briefly exploring the various approaches to economic development, potential triggers for effective government for catch-up growth are considered. By drawing on evidence of past catch-up growth episodes in East Asia, it is suggested that they may be explained by a synthesis of the basic human needs (equity) and "new developmentalist/neo-structuralist" approaches. What is 'new' in new developmentalism and how a broader view of equity can play into it are explained. The construction of a proposed equity index could help in exploring the significance of equity as a trigger for catch-up growth.

I. Introduction

Catch-up growth is the economic process that low and low middle-income countries (L/LMICs) undergo to reach the per capita income levels of middle-income and high-income countries (M/HICs). Based on "the rule of 72" this happens if these countries can sustain per capita gross domestic product (PCGDP) growth rates of seven per cent or more for several decades. A seven per cent growth rate causes PCGDP to double in about ten years. China has doubled and re-doubled its PCGDP several times since the late 1970s when its catch-up growth began, and it

^{*} Research Associate, Mount Holyoke College, South Hadley, Massachusetts, USA.

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is now comfortably an upper middle income country (UMIC).² The focus in this research is on the many L/LMICs that have not sustained high enough economic growth rates to catch up in a meaningful way and hence are not considered part of the convergence club.³

This research starts by defining effective government since that is needed for policy implementation whatever the economic development approach adopted for catchup growth. Assuming effective government, a hypothetical catch-up growth process is delineated next. While there are excellent case studies documenting the catch-up growth process, there is little attention given to triggers that might bring it about; addressing this issue is intended to be one contribution of this research.⁴

Effective government needs to rely on galvanized citizens willing to be part of the catch-up process, especially since short-term costs and trade-offs are likely to be involved. The association between effective government and willing citizenry is dialectical and mutually reinforcing. However, there is a chicken-egg dilemma of which comes first and this research addresses the issue of breaking the Gordian knot to create a willing citizenry.

After explaining a process of catch-up growth, I make a case for effective government rather than "good government" and argue that corruption is not necessarily a valid theory of underdevelopment. Next, by briefly exploring the various approaches to economic development, potential triggers for social galvanization or a willing citizenry for effective government are considered.

Examining past catch-up growth episodes in East Asia, I argue that they may be explained by a synthesis of the basic human needs (equity) and "new developmentalist" /neo-structural approaches (henceforth referred to as new developmentalism).⁵ I briefly

³ The literature on convergence and convergence and divergence clubs was sparked by Baumol (1986).

⁴ For the classics on catch-up growth, refer to Amsden (1989), Johnson (1982) and Wade (2004).

⁵ The term new developmentalism has been used by Bresser-Pereira (2006) who drew inspiration from East Asian economies. Bresser-Pereira (2006, p. 9) pointed out that his collaborator Yoshiaki Nankano suggested the term new-developmentalism in 2003 for the program they were working on. The industrial policy and anti-poverty mix developed by independent Latin American scholars (ed. Sunkel, 1993) and ECLAC in the 1990s as a heterodox alternative to neo-liberalism is referred to as neo-structuralism. This program with its emphasis on changing production patterns and technology is similar to new developmentalism (Bielschowsky, 2009). The emphasis on social inclusion and environmental conservation in neo-structuralism differs from the silence on these issues in new developmentalism but the commonality in these approaches exceeds the differences, and hence they are viewed jointly.

² Using 1978 as the base, the year generally associated with the initiation of market reforms, China's real per capita GDP in 2010\$ has gone up from \$307.76 to \$ 6,497.48 in 2015, a twenty one fold increase. The World Bank 2017 income group classification of upper middle income starts at \$4,036 and higher income at \$12,475. Data are drawn from the online version of the World Bank, World Development Indicators. Once a country attains MIC status the game changes. As the economic base expands, clocking higher growth rates is more difficult because the low hanging fruits of easy investments and opportunities have been harvested, off-the-shelf technology is not as easily available, and domestic innovations are more difficult to make. Thus the decline in Chinese growth rates from double digits in earlier decades to the relatively tame seven percent in this decade should not have been unexpected. Some economists have theorized that there is a middle income trap in the path to higher income status. Refer to Gil and Kharas (2015) and Wade (2016).

explain what is new in new developmentalism and how a broader view of equity can play into it.⁶

To sum up, this research draws on the development literature to synthesize contributions. The main contributions of this research is highlighting the importance of identifying a trigger mechanism for catch-up growth, suggesting a possible trigger, suggesting that the emphasis on good governance is overrated and that a focus on effective government is a better avenue for policy implementation and finally in the conceptual synthesis describing the catch-up process.

Defining effective government and describing a hypothetical catch-up growth process

Effective government is defined in this paper as one in which the leadership is willing and able to deliver catch-up growth in conjunction with businesses and civil society. Thus effective government is not necessarily "good" government but one that can induce citizens to play their crucial part in a national project of catch-up growth.

While catch-up growth has mechanically been defined above in terms of GDP growth rates the underlying process cannot be captured by a summary statistic. In the East Asian experience, the essence of the process was improving the quality of goods and services delivered by the public and private sectors. Pride of performance results in good public service, good social and physical infrastructure, and lower transactions costs, and these mechanisms in turn facilitate businesses.

Individual motivations are complex, but that not with standing, the catch-up growth process demonstrates that individual functioning in civil society, bureaucracies and businesses is allied with the national project of delivering quality. By delivering reasonably honestly on contracts and terms of service, individuals on average serve the broader purpose.

The profit motive is harnessed by government to have businesses deliver innovations and improved product quality to break into export markets. As explained below, in the East Asian episodes of catch-up growth (Japan, Korea, Taiwan), this profit motive was harnessed by the economic bureaucracy in a partnership with business for a broader purpose. The market mechanism was not deemed adequate, but rather used as a tool.

Since catch-up growth entails harnessing millions of public and private decisions for a common national purpose, it is an immensely complex and messy process. If the public at large is willing to trust the leadership's purpose, hurdles can be overcome along the way and mistakes rectified. Since initial conditions and political systems vary, one should expect different paths. However, the commonality so far is the dominant state role in guiding the catch-up growth process.

⁶ An alternative but narrower technique to what is proposed in this research is growth diagnostics [Hausmann and Rodrik (2005) and Hausmann, Klinger and Wagner (2008)].

Predation as a barrier to catch-up growth

Lay persons are often convinced that corruption is the theory of underdevelopment. In addition, influential development economists also suggest predatory and corrupt leadership is to blame for underdevelopment. Accemoglu and Robinson (2012) offer perhaps the most influential narrative in the development economics literature on predation as a theory of underdevelopment.⁷ They view elites as prone to predation and self-enrichment. However, development is premised on harnessing the productive potential of much of the nation's population and hence requires inclusive political and economic institutions. Inclusive political institutions evolve historically via different mechanisms and processes in different countries. At critical junctures small differences, possibly due to luck, can have lasting impact due to cumulative causation and the onset of vicious and virtuous circles.

One can take issue with this thesis for four reasons. First, the evidence cited below suggests that predation need not block catch-up growth. Second, the evidence also suggests that institutions are often endogenous and therefore not a precondition for catch-up growth. Third, nations, like individuals, often create their own luck and need not await the long span of history. Fourth, predatory leadership has self-interest in promoting catch-up growth and need not necessarily be engaged in a zero-sum game as implied in the Acemoglu and Robinson thesis. However, let us return for the moment to the story of how predation may block catch-up growth.

The notion is that predatory leadership will perceive their interests at odds with those of the governed and act accordingly in a rapacious fashion. In these circumstances, one would expect the governed to focus on surviving and getting ahead as best as they can. If catch-up growth is viewed as collective action in the broadest sense of the term, predatory leadership would clearly undermine it.

However, this scenario need not be the only one that plays out even when institutions are weak and the rule of law not widely prevalent. Currently, both the Chinese and Indian governments are making much of corruption. However, China has already attained the key phase of its catch-up growth, and corruption seems not to have been a constraint in its doing so. India has been clocking high economic growth rates for close to three decades. If it manages to sustain these, it will be yet another example of sustained catch-up growth. Again, India's catch-up growth was initiated well before its anti-corruption drive.

A review of case studies of catch-up growth in Japan, Korea and Taiwan shows that local newspapers reported high levels of corruption. Chang (2006) has convincingly documented this point as has Rodrik (1994), who disputed that the East Asian economies conformed to "good governance" as identified by the World Bank. Rodrik argued that all the good governance criteria were violated and that corruption was a noted problem in all these countries.

⁷ Evans (1995) and Kohli (2004) present useful theories of the state relevant to catch-up growth and discuss the concept of a predatory state.

Even if the leadership is predatory, it has reasons for wanting catch-up growth. The motivation might be national pride or avoiding a loss of face from seeing others in the region prosper. It might be the legitimacy and political survival that delivering economic development brings. It might be the association of economic development with military strength for those in rough neighbourhoods. Catch-up growth certainly enhances the global power and prestige of the leadership. Also, the leadership may be smart enough to realize that the larger the pie, the larger its slice.

A leadership that is driven to make catch-up happen is among the key ingredients for a catch-up growth process, and the leadership's motivation for catch-up growth can be thought of as the source of "political will." While political will is often seen as a requirement for economic development, there is little consideration of how it is likely to emerge.

Some possible triggers

It is possible to draw on various approaches to economic development to identify possible triggers. For example, economists have emphasized 'good' governance, the flip side of the coin from predation. This has been most associated with North (2003, 2005), though it has been adopted by the World Bank and other organizations as the second wave of neo-liberal reforms on good governance including protecting property rights, enforcing the rule of law, effectively implementing anti-corruption policies and achieving government accountability and transparency.

Another key associated neo-liberal recommendation is to get the business conditions right and the market will take care of the rest. This has been made operational by the World Bank by ranking countries on various indicators measuring how business friendly they are.

Basic human needs/human development are alternative approaches privileging different preconditions. The Basic Human Needs (BHN) approach was proposed by ILO (1977) and it was reincarnated in the early 1990s by Mahbub ul Haq with advice from Amartya Sen as the Sustainable Human Development approach [Anand and Sen (1994)]. With the organizational backing of UNDP, the approach gained traction and the UNDP annually ranks countries based on Human Development Indicators. The BHN approach is broader since it includes asset redistribution.

Sen (1999) extended this approach conceptually and suggested that "expansion of freedom is both the primary end and principal means of development". Various rights, opportunities, and entitlements expand freedoms, which have both an intrinsic and instrumental value. Several multi-dimensional indicators have been developed to measure the enhancement of capabilities [Alkire, et al. (2011)].

Chambers (1983) popularized grassroots participation as a method that complements the human development approach with participation making service delivery more effective. Acemoglou and Robinson (2012) extended the concept of participation to the political realm and hence suggest political inclusion as a starting point. The Human Freedom index is often used in empirical work pertaining to this issue.

Scholars have argued that the above triggers are endogenous to or by-products of the development process such that as societies prosper, institutions strengthen, human development is enhanced, business conditions improve, and political participation increases.

Chang (2010) made this argument for the human development approach. Khan (2012) provided evidence to suggest that "good governance", as defined by the World Bank, was not necessarily effective in triggering and sustaining economic growth and that the causality could run in the opposite direction. Yeung (2017) argued that East Asian political history demonstrated that political inclusion followed rather than preceded catch up growth.

The extent to which any potential trigger is endogenous is a question of degree. Evidence from East Asia cited below suggests that equity has been effective as a trigger to initiate catch-up growth episodes and virtuous cycles (equity as an initial condition reinforcing effective government and so on). Proposing equity as a possible trigger does not preclude others in different contexts: there is absolutely no reason why there needs to be a search for a unique trigger since more than one could operate at any given time to initiate catch-up growth.

Equity principles could be distilled from some theory of justice. Since inequality has received much attention, especially after the publication of Piketty (2014), inequality needs to be distinguished from inequity. The latter is suggestive of unfairness as judged by some concept of justice. Inequality may be based on inequity (social exploitation) but it need not be. Also, promoting equality may result in inequity -- taking people's due share for redistribution if the initial distribution was just. Further, in the context of catch-up growth it may blunt incentives. Based on the East Asian experience, equity here can be summarized as meeting basic human needs as an initial condition and this includes human development along with land reform.

To demonstrate that equity might be an effective trigger, we need to adopt a particular approach to economic development among several proffered in the literature. Of the various economic development approaches, two are currently competing for attention.⁸ One is the mainstream neo-classical approach that is focused on a set of neo-liberal market oriented structural adjustment reforms. In a nutshell, the strategy can be summarized as fiscal austerity (euphemistically referred to as fiscal consolidation),⁹ privatization, deregulation and liberalization.¹⁰ The alternative is the new developmentalist approach with industrial policy as the core. In a nutshell, the strategy is to promote technological learning and movement up the value chain by diversifying the economy.

 $^{^{8}}$ For a detailed exposition of alternative approaches to economic development refer to Khan (2014).

⁹ Fiscal consolidation sounds less onerous than fiscal austerity or budget cutting that often targets social expenditures.

¹⁰ Williamson (1990) is associated with the set of neo-liberal reforms that started being referred to as The Washington Consensus.

Implementing either set of reforms requires strong and competent leadership and a fully committed bureaucracy. This is so because there are winners and losers from reforms and foot dragging is inevitable. The success of neo-liberal reforms is contested, partly because they accentuate social inequality.¹¹ It is proposed that the success of the East Asian growth episodes represent a synthesis of the basic human needs approach with new developmentalism, a distillation of the economic development lessons learnt from their catch-up growth episodes.

What is new about new developmentalism and how does equity play into it?¹²

As in the case of developmentalism, the conceptual underpinnings for new developmentalism are market failures and an important component of the policy agenda is industrial policy.¹³ Industrial policy is defined as the ability of the state to strategically influence targeted industries that exhibit increasing returns.¹⁴ More broadly, effective industrial policy requires supportive trade, technology, employment, financial, infrastructure, competition, and institutional policies, and this is a core element of the new developmentalism approach just as structural adjustment was, and arguably still is, the core element of the neo-liberal approach.¹⁵

The trade theory underpinnings for this approach is that of dynamic comparative advantage of selected industries resulting inter alia from high potential for technological development, learning by doing, training, labor productivity, income-elasticity, economies of scale, energy efficiency, and externalities (including diffusing managerial and marketing skills). These features justify product selection and specialization even if static comparative advantage does not point in that direction.¹⁶

New developmentalism scholars have established the important role of the state, premised on a reasonably efficient economic bureaucracy, and this came as an important challenge to the neo-liberal agenda of rolling back the state based on "government failure."¹⁷ They also pointed out that implementing the neo-liberal program of structural adjustment is actually no less 'good government' intensive than im-

¹⁴ For another definition refer to UNCTAD (2006). For supportive expositions, refer to Amsden (2001), Wade (2004), and Chang (2006). For critiques refer to Pack and Saggi (2006) and Baumol, Litan and Schramm (2007).

- ¹⁶Using different methods, Khan, Bilginsoy and Alam (1997), Pieper (2000), UNIDO (2009) and Gurbez (2011) find empirical support for the centrality of manufacturing or industrialization to catch-up growth.
- ¹⁷Bauer (1976) and Lal (2000) are prominent in this critique of the developmentalists or of what is referred to as dirigisme.

¹¹ The literature on the critique of neo-liberal reforms, in terms of not delivering growth and in enhancing poverty and inequality, is huge. Taylor (1997), Taylor and Pieper (1996) and Elson (1990) who is a prominent critic from a feminist perspective.

¹²Bresser-Pereira (2016) is a more recent statement of his understanding of new developmentalism and represents a macroeconomic policy framework that complements the meso policies identified in this section.

¹³ The pioneers of developmentalist thinking include Rodenstein-Rodan (1943), Nurkse (1953), Lewis (1954) and Hirschman (1959).

¹⁵Structural adjustment encompasses all aspects and sectors of the economy. Industrial policy is equally broad since as indicated its success is dependent on supportive sector policies.

plementing the industrial policy program. However, that notwithstanding, the commonality among new developmentalism scholars is that they are eclectic, pragmatic, and supportive of institutional development with the market harnessed as a means.¹⁸

So far, one could argue that little has been said that really distinguishes developmentalism from new developmentalism. It would be difficult to make the case that the pioneering developmentalists were not pragmatic and eclectic. Indeed, Lewis (1954) was agnostic about whether industrialization should be engineered by public or private enterprises. In this regard, the vision of the developmentalists and new developmentalism is likely to be the same. Both argue for sustained economic development and believe that industrialization based on developing an indigenous technological capacity is likely to deliver that.

The vision underlying the developmentalist import substitution industrialization (ISI) program became conflated with the tools used by governments and hence dismissed. Thus, developmentalism in this critique is not associated with a vision but with heavy-handed intervention, centralized planning, and corrupt and inefficient bureaucracy.

The body of scholarship referred to as new developmentalist (endnote 4) represents a careful and painstaking empirical demonstration that the developmentalist vision has resulted in catch-up growth. While there were differences among countries, the commonality was coherent and nuanced and well implemented industrial and support policies. This came as a challenge to the mainstream view espousing East Asian economic development success to free market policies. Establishing the alternative explanation has been a phenomenal breakthrough in the economic development literature. Even the World Bank, a bastion of neo-liberalism, acknowledged this view of the success of high performing East and South East Asian countries, although it added undermining qualifications and did not acknowledge key authors responsible for the breakthrough.¹⁹

There are many additions and conceptual refinements that can be added to developmentalist thinking based on case studies of East and South East Asian countries that experienced catch-up growth. Drawing on the essence of the writings of the many scholars cited above, several notable additions stand out. First, incentives to businesses were premised on delivery and performance criteria were used to access success. Thus, for the incentives to be continued, firms had to show productivity growth, local content use, profit growth or all of the above by breaking into export markets. Further, if needed, the state has the ability to sanction non-delivery.

Second, the government ensured the discipline of internal market competition, even as firms were protected from premature external competition, by determining

¹⁸Wade (2004) captures this well with his term "governing the market."

¹⁹For example, while discussing industrial policy, World Bank (2005) makes no reference to the relevant works of Alice Amsden, Ha-Joon Chang or Robert Wade.

an optimal number of players in an industry (enough for competition but not so many that economies of scale would be diluted). Without such competitive discipline, import-substitution industrialization can degenerate into crony capitalism as happened in many low income countries.

Third, to create the rents necessary to induce some activity, the state needs to systematically get the incentives right,²⁰ which is not the same as getting the prices right. Finally, ISI and export promotion (EP) have a symbiotic association and that these two are not alternative trade and industrialization strategies.²¹ Thus, different industries may be going through different phases and so while some might be in an ISI phase, others may have graduated to EP. ISI here is viewed as necessary to build the base for EP and in turn the latter provides resources, particularly foreign exchange, to further ISI in other industries, propelling the economy to move up the value chain and diversify.

New developmentalism represents as much a theory of effective government as of economic development policy. Since it has been distilled from what worked in terms of embodying eclectic and pragmatic industrial policy in a coordinated set of support policies, it would have been difficult for the early developmentalists to have conceived it.²² Perhaps the early developmentalists should also not be faulted for the lack of environmental consciousness that is now much more widespread, but the onus of ensuring sustainable industrial development falls on new developmentalists.

Finally, distinguishing new developmentalism from developmentalism distances it from what developmentalism has become associated with as indicated earlier: the use of heavy-handed and incompetent bureaucracies, misguided policies that backfired, rent seeking, inefficiency, and ineffectual support policies by planning agencies.

Also as explained above, the new developmentalist policies and practices identified above are meaningless if citizens are not motivated to strive for catch-up such that their individual and collective decisions sustain the process. For citizens to identify with a national project of catch-up growth, equity, more broadly defined, needs to play into the process.

If individuals feel that it is not simply their class position that ensures social mobility then hard work is more likely. If they feel that there is reasonable delivery of credit and quality social services, they are more likely to be willing and able to

²⁰Indeed Amsden (2001) points out that the commonality in developmentalist states was "getting prices wrong", to selectively create rents, and getting institutions and control mechanisms to implement reciprocity right.

²¹ Krueger (1978), who led a set of National Bureau of Economic Research studies criticizing ISI, suggests a distinction between ISI and EP. Khan (2014) pointed out that Prebish (1950), whose name is more associated with ISI than any other scholar, made no unqualified endorsement of ISI but rather proposed a very nuanced and comprehensive trade and industrialization strategy, one that included the importance of exporting from the onset.

²²Rienert (2007) and Chang (2002) however argue that this lesson is self-evident from historical analysis of how the west industrialized.

participate in a national project such as catch-up growth. If farmers own the land they cultivate, they work harder and are better shepherds of the resource.²³

To harness bureaucratic will, which is crucial to initiating developmentalist catchup growth, bureaucrats need to feel that merit counts in delivering for the public. If incentives are so structured and applied across the board, all bureaucracies (civic, economic, police, legal, military) are likely to work much harder for the public interest.

If businesses know that cultivating economic bureaucrats is not the path to quick rents, it is more likely that they will want to become the engine of catch-up growth. If they know that the performance criteria (in exchange for incentives) are fairly implemented, they are more likely to be willing to deliver on them. If they know that taxes are justly paid at the highest political levels in a transparent way, they are more likely to contribute to the fiscal effort to implement industrial policy. Again, harnessing business will is about equity.

If there is a fairer distribution of national resources, ethnicities and regions will be more willing to subsume their ethnic and regional consciousness into a national consciousness and make the nation more governable. Sectarian and communal conflicts are challenging, but they are likely to abate or be less intense in societies that provide more opportunities and where individuals are therefore less easy to manipulate. Once catch-up growth delivers prosperity, history suggests that such conflicts continue to recede in importance as a by-product of the prosperity.²⁴

Also, once the catch-up growth process is underway, equity reforms of the kind described above can sustain it in a virtuous cycle. It is in this context that the Chinese and Indian governments' current concern with corruption and social safety nets is eminently sensible. Equity reforms are likely to be popular and therefore the political-economy more straight-forward in some cases.

Evidence for equity as a trigger in the new developmentalist approach

Certainly, a democratic political regime may find equity reforms more consistent with its polity, but the evidence suggests that the more autocratic East Asian countries laid a very strong foundation of equity with land re-distribution, social sector delivery and rapid wage growth. Johnson (1982) referred to the "three sacred treasures" as fun-

²³ Logic may not be enough to establish the economic case for small owner cultivation. There is an on-going debate on this issue that dates back several decades and appears to have picked up steam of late once again. It is premised on empirically establishing an inverse association between farm size and land productivity. Land distribution following land reforms, to establish owner cultivation, will result in smaller farm sizes and the concern is that these small holdings might be less productive than mechanized commercial agriculture based on large holdings. Empirical support for the inverse association of land size and productivity has been provided among others by Kagin and Edward (2016), Ali and Deininger (2015), Gaurav and Mishra (2015), Carletto, Savastano, and Zezza (2013), Verschelde, et, al. (2013), Banerjee (2000), and Heltberg (1998), Faruqee and Carey (1997), Prosterman (1987), Johnston and Tomich (1985), Berry and Cline (1979), Dorner (1972), Dorner and Kanel (1971) and Ruttan (1969). Several of these authors argue that equitable provision of research and extension services and inputs across farm size is a pre-requisite for small farms to show greater technical efficiency.

²⁴Getting past deep seated communal hatreds is one of the major challenges confronting India in its bid for sustained catch-up growth.

damental to Japanese catch-up growth. These were traditional enterprise unions, seniority-based wages and "lifetime" employment, which created labour-capital harmony, innovation (including labour saving ones), a focus on quality control, and product development timed to market demand.

Amsden (1989) pointed out that although unionization was repressed in Korea during its catch-up growth, worker's wages rose rapidly from a low base due to government pressure. This was done to attain a number of objectives including sharing wealth with labor for social stability, a larger market, inducing productivity and technology acquisition, and an incentive/reward for workers to learn to operate this technology.

Wade (2004) documented that Taiwanese catch-up growth was accompanied by an unusually equal distribution of income. Real earnings increased by 18 per cent between 1960 and 1980, even while unionization was repressed. Also during roughly this period (1968 to 1982), unemployment was halved from the four per cent in the beginning of the period. He also pointed out that in Taiwan, as in Korea, Japanese colonial power instigated land reforms that ended absentee ownership and transferred land to local small holders.²⁵

Post World War II, the "mainlanders" (from mainland China) instituted another round of land reforms, invested in irrigation and rural infrastructure, and provided small holders with inputs at subsidized rates. This enabled the state to turn the internal terms of trade against agriculture and also draw off the agricultural surplus with taxation (25 per cent tax burden) for industrialization based catch-up growth.²⁶ The state also blocked other means of wealth accumulation such as land speculation (via the land reform) or financial activity that enhanced social inequality while undermining industrialization.

In challenging the World Bank's (1993) neo-liberal view on what accounted for the growth of high performing East Asian economies (HPEA), Rodrik (1994) argued it was the much greater equity in land ownership, income and access to education and human capital, as part of the initial conditions, which explains the superior economic growth performance of these countries.

While the focus in this research is on equity as a trigger mechanism, not surprisingly HPAE that demonstrated catch-up growth also had high level of social equality by initially focusing on equity as evident from the case studies cited above. Social equality could facilitate political stability and hence sustain the catch-up growth process.²⁷

²⁵ Boosting rice and sugar production were among the Japanese motivations for enforcing these reforms but the impact on equity is the issue at hand here.

²⁶ In Korea, the Saemaul Undong (cooperative movement) in the 1970s [Park (2009)] followed sweeping land reforms in the 1950s and provided small farmers electricity, link roads (farm to market), storage facilities, input subsidies, credit, mechanization, and research and development and extension support. This enabled agriculture to become a base for industry much as in Taiwan.

²⁷ Alesina and Rodrik (1994) and Persson and Tabellini (1994) suggest that the channels through which social inequality might lead to lower growth is the demands for redistribution which may in turn negatively impact investment.

While observers are struck by the institutional reforms China initiated in the late 1970s onward that are associated with catch-up growth, they neglect the foundation of equity that was earlier laid with investments in gender, social and human development.²⁸ Similarly India's democratic polity has been concerned with social safety nets including employment guarantee, public food distribution and public health even while a LMIC.

While this emphasis on initiating catch-up growth and building it on a foundation of equity may seem like common sense, policy naturally needs to be based on evidence. As cited above, there is much evidence, based on the inductive method, to associate the initiation of catch-up growth with equity. Orthodox economists however prefer evidence to be based on the deductive method.

Cross country econometrics often used to identify significant determinants in growth equations is problematic for several reasons but particularly because of the straitjacket of structural similarity imposed on countries when treated as a unit of observation. This is meaningless if the point of the exercise is to identify structural differences. Another problem is that the number of catch-up growth episodes, post World War II, are limited. There is no easy way to get control groups because countries can differ in so many ways and certainly randomization is not possible. Time series analysis is somewhat more promising as demonstrated by Rodrik (1994) but finding enough observations for effective time series analysis is challenging.

While the qualifications above need to be borne in mind, the "poverty and equity" data set of the World Bank may be a good place to start in constructing an equity index. Other indices that could be mined for this exercise include the Physical Quality of Life Index, Measurement of Economic Welfare Index, Human Development Index, and Happiness Index.

Conclusion

While there are many excellent case studies of individual episodes of catch-up growth, the focus in this paper is on identifying a trigger that initiates the process by creating a virtuous cycle. It argues that the evidence contradicts the notion that predation is a valid theory of underdevelopment. By the same token, it argues that evidence does not support good governance, as conventionally defined, as either a critical trigger or implementing mechanism for economic development. It argues that the focus needs to be on effective government, rather than on good government, as a policy implementing mechanism.

²⁸ In fact a review of the early Human Development Reports show that all ex-socialist countries, including China, are notable in starting their transition to some form of a market economy with very high life expectancy and mean education indicators relative to their per capita GDP in purchasing power parity \$s. Thus while equity is not a sufficient condition for take-off growth, since not all transition economies have prospered like China, it may be necessary for countries consciously embarking on a national catch-up growth project as described above.

The evidence suggests that good government and other possible triggers like better business conditions and political inclusion are more likely to be endogenous to economic growth rather than factors that will initiate the catch-up process. The evidence suggests equity (human development with asset distribution) as an alternative trigger and though it too can be viewed as endogenous, this paper argues that case studies and econometric evidence suggest it has been an effective trigger.

This research heuristically explains the East Asian catch-up growth process as a synthesis of the basic human needs (equity) and new developmentalist approaches. It explains what is new about new developmentalism and how equity can more broadly play into it. Finally, it points to possible empirical problems in testing the hypothesis of equity as an effective trigger using the deductive method but nonetheless proposes the construction of an equity index to explore this issue further.

This research suggests that addressing equity rather than inequality should be the priority. This is far easier said than done even if the political economy works in favor of a reforming government (winners far outnumber the losers). One problem is that policy advice, such as that forthcoming from donors or even the sustainable development goals, requires addressing an overwhelming number of objectives and lacks an overarching vision of economic development.

Instead, based on equity considerations, prioritizing a few policies might yield the trigger for catch up growth. Based on the review of the literature, parsimonious equity driven policy recommendations would be to prioritize multi-win green agriculture (accompanying land reform), multi-win green industry²⁹ (since pollution makes competing difficult for poor children), quality education (access is not enough for equity) and quality health (with a focus on clean water) with gender equity as a cross cutting issue. The overarching vision driving the structural reforms is diversifying the economy and moving up the value chain as prescribed by the new developmentalists.

Mount Holyoke College, South Hadley, Massachusetts, USA.

²⁹ Explaining the nature of the multi-wins, including breaking into export markets, in greening agriculture and industry is beyond the scope of this paper due to space considerations. For details refer to Khan (2019). The sectoral share of the service sector increases as countries prosper but if the productive sectors are greened, this is reflected in the service sector to the extent that it draws on the productive sectors.

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