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# Supporting Inclusive Growth Effective Policy Design for Developing Medium Technology Sectors

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# List of Abbreviations

|         |   |
|---------|---|
| ASEAN   | Association of South-East Asian Nations       |
| ATIGA   | ASEAN Trade in Goods Agreement                |
| AFTA    | ASEAN Free Trade Agreement                    |
| FDI     | Foreign Direct Investment                     |
| GDP     | Gross Domestic Product                        |
| MFA     | Multi-fibre Arrangement                       |
| OEM     | Original Equipment Manufacturer               |
| PVText  | A subsidiary of VINATEX                       |
| SOE     | State-owned enterprise                        |
| SITP    | Scheme for Integrated Textile Parks           |
| TPP     | Trans-Pacific Partnership                     |
| UNDP    | United Nations Development Programme          |
| VAMA    | Viet Nam Automobile Manufacturers Association |
| VINATEX | Viet Nam National Textile and Garment Group   |
| VITAS   | Viet Nam Textile and Apparel Association      |
| WTO     | World Trade Organization                      |

# Executive Summary

Growth is more inclusive if it creates opportunities for wider groups of entrepreneurs to enter the growth process, and if it creates a wider range of employment opportunities. For a middle-income country that is still catching up by attracting existing technologies from more advanced countries, government policy can affect the sectors that are developed by domestic and foreign investors. Policy-makers have to ensure that the sectors that are supported by policy are those that directly or indirectly create the widest possible entry opportunities for domestic entrepreneurs and workers in the near future, and these sectors should also have the maximum positive spillovers and linkages with other sectors so that further economic development can result through these linkages.

Since policy implementation capacities are constrained by the capacities of states to enforce the conditions that can ensure that policy support is not captured in unproductive ways, policy design has to take into account the institutional and political constraints of particular countries. In particular, effective policies have to be sensible in their scope and ambition, and appropriately designed in terms of their targets and conditions to ensure that the critical components of the policy can be realistically implemented.

Viet Nam faces a number of challenges that have to be addressed and overcome for policy to become more supportive of sustainable and inclusive growth. The first challenge is to identify the sectors that are likely to fulfil the conditions of rapid entry and employment generation. It is not possible to precisely identify the future entry and employment conditions associated with particular sectors, and indeed it is not necessary to achieve a high level of precision in identifying specific sectors. More important is to identify the 'difficulty' of particular technologies for domestic entrepreneurs and workers, as this is where capability constraints constrain inclusive growth. This part of the exercise is much easier and it is sufficient for policy-makers to identify the likely

capabilities of domestic firms, entrepreneurs and workers in entering particular segments of the global value chain.

Policy should identify the highest levels of likely entry given the existing spread of capabilities in the country, and then support firms with policies that enable them to achieve competitiveness in these segments. A simple reliance on attracting FDI may not be sufficient for identifying the most desirable foreign technologies to attract to Viet Nam. Policy should also identify the necessary support that has to be provided to domestic component manufacturers and others to maximize the benefit from linkages to FDI, which is likely in the first instance to be largely based on the assembly of imported components. The sustainability of an inclusive growth strategy in a relatively small country like Viet Nam requires policy-makers to think about what types of FDI to attract based on the components that are most likely to be sourced out to domestic producers, followed with an assessment of the types of support policies that can feasibly develop the competitiveness and capabilities of the relevant domestic producers. This strategy, which is a joint strategy for attracting the appropriate FDI together with policies of supporting the relevant domestic component producing capabilities, we describe as a strategy of supporting broad-based medium technology (components-manufacturing) sectors.

To make such a strategy work, attention has to be given to a second set of challenges that arise from the experience of relatively poor policy implementation in the past. The design of policy was often inappropriate because support was given to organizations with conditions that were either inappropriate for ensuring rapid capability development, or which could not be enforced. Most developing countries have a mixed record in supporting capability development in new sectors, particularly because of these types of implementation failures. However, we also know that by changing the design of policies

and providing support in a different way or to different types of firms, significantly better results were often achieved. This is an important lesson that Vietnamese policy-makers can learn about the design of 'rent-management strategies'.

Finally, policy-makers also have to operate with a more limited policy space. Many policy instruments like tariffs and some subsidies are being phased out as a result of joining the WTO, and policy space may contract further once the Trans-Pacific Partnership (TPP) and other trade and investment agreements become effective. This is a constraint, but not as serious a constraint as is often thought. Many of the instruments that

are being phased out did not work effectively in the past anyway, and redesigning these policies to make them more effective may be difficult. The challenge will be to design new policies using instruments that are allowed by the new agreements. Our aim here is not to identify the precise intermediate technology components sectors to support, or suggest very detailed policies. Rather, our aim is to identify the policy challenges that Viet Nam faces, and the types of sectors, policies and policy designs that are likely to work.

# I. Introduction

Viet Nam has made tremendous progress over the last two decades in raising living standards and reducing poverty. However, growth rates and the rates of poverty reduction have been slowing. The challenge Viet Nam faces now is not just to sustain growth in the context of a global slowdown, but also to ensure that growth is inclusive.

Growth is more inclusive the more it allows citizens to participate in, contribute to and benefit from growth, regardless of their individual

circumstances. From a policy perspective, governments can ensure that growth is more inclusive by supporting the development of new sectors that create entrepreneurial and employment opportunities across broader segments of society. To be sustainable, these **strategies have to ensure the eventual emergence of competitive firms and activities that can survive beyond the policy support that helped them emerge.**

## Box 1 Foreign Direct Investment (FDI) and the Growth of Competitive Domestic Firms

Since the 1980s, the growth of competitive domestic firms in many developing countries has been closely linked to strategies of attracting FDI. However, the evidence shows that FDI by itself does not necessarily result in sustainable and inclusive growth. The positive effects of FDI can be significantly reduced if it crowds out domestic investors or makes it more difficult for domestic investors to develop their capabilities and competitiveness. In other words, FDI can either 'crowd in' or 'crowd out' domestic investments. Unfortunately, crowding out has happened in various periods and regions, including in particular in Latin America (Agosin & Machado, 2005). In several East European countries, like Hungary, Poland and the Czech Republic, high technology automotive and electronics investments have not always resulted in significant opportunities for components production by domestic companies. This has constrained inclusive growth and created dualistic economies that have become dependent on the locational decisions of a few multinational companies (Pavlínek, 2004). This type of duality in the domestic economy as a result of FDI has also been observed in several East Asian high-growth economies where FDI has not interlocked very well with the development of domestic component production capabilities. This is the case, for example, in both the Thai and the Indonesian automobile sectors that are heavily dependent on the strategies of Japanese companies and the development of competitive domestic components production has been relatively slow (Irawati & Rutten, 2014; Khan, 2012b).

In contrast, in countries where FDI has generated significant subsidiary employment and entrepreneurial opportunities, this has been through the development of domestic productive capabilities in linked firms. An interesting paradox is that at least initially, lower technology domestic producers are most likely to be able to supply components to foreign invested enterprises. This is because lower technology domestic manufacturers are most likely to be able to achieve sufficiently high competitiveness and product quality in their segment to competitively integrate into the production chains of multinationals. In contrast, higher technology domestic component suppliers may face a bigger gap in competitiveness against

competing international suppliers and are likely to be squeezed out. Not surprisingly, the **countries that have benefited most from FDI are those that have been able to have supportive policies for the development of linked domestic capabilities, initially at fairly low levels of technological sophistication.** This allows domestic firms to rapidly enter into the supply chains of foreign invested enterprises and the ability to produce competitively also enables these domestic component suppliers to grow further by directly exporting into global markets. China has arguably been one of the most successful countries in achieving inclusive growth through FDI using such a strategy. In China, FDI was associated with a significant improvement in the competitiveness of domestic enterprises (measured by manufacturing value added per capita and manufacturing exports per capita), but even as late as 2005-2010 the improvement in competitiveness of Chinese domestic firms was most dramatic for lower technology firms (Zhang, 2014). In the longer term, the fact that China has developed such a broad range of organizational capabilities in thousands of low to medium-technology firms in different sectors means that many of these firms are likely to succeed in organically moving up the technology ladder, and that is indeed happening now.

In other words, China's success in employment generation and poverty reduction through FDI was associated with the dramatic growth of competitive labour-intensive domestic component firms that created massive employment opportunities. The growth of these firms was not accidental but the result of appropriate government policies supporting the development of domestic firms in different technology segments. These policies included preferential interest and tax rates for targeted sectors, trade protection and pricing policies and direct government financing (Lu, 2000). The success of particular instruments depends on the overall market, institutional and political context, and so Chinese policy instruments cannot necessarily be replicated by other countries. Nevertheless, the general principles underlying the success of China's inclusive growth strategy are of broader applicability. Indeed, the general proposition that access to foreign technology and finance through FDI has beneficial effects for domestic firms, applies only if the latter have the technological and organizational capacity to benefit from these linkages. This is supported by evidence from many other countries, for instance, India (Siddharta & Lal, 2004), Ethiopia (Seyoum, Wu, & Yang, 2015) and Bangladesh (Khan, 2013a).

**International evidence suggests that FDI can assist inclusive growth strategies, provided i) the type of FDI is such that it creates significant opportunities for domestic companies to benefit as suppliers or otherwise gain from spillovers and ii) there are complementary government policies enabling a large number of domestic companies to develop their capabilities to competitively engage in these roles.**

Many policies for supporting the emergence of new sectors and firms in Viet Nam have performed poorly in the past because they failed to ensure the emergence of competitive firms that could survive without the initial policy support.

As Box 1 shows, in **developing countries, the sectors that are most likely to drive inclusive growth are medium technology sectors that are intermediate in terms of capital-intensity and technological sophistication. Compared to**

**high-technology sectors, these sectors require less capital and generate more employment and are more likely to achieve competitiveness in global markets. At the same time, compared to very low-technology or informal sectors, they offer higher wages and the potential of higher productivity growth.**

Medium technology sectors include many of the industry clusters that serve as 'supporting industries' providing inputs and components to more sophisticated final product producers and assemblers, who are nowadays likely to be global multinational companies or FDI investors within the country. Without local clusters of supporting industries, higher technology sectors dominated by multinationals will either not arrive, or if they do, they are likely to import most of their required components from abroad, with limited creation of local employment and entrepreneurial opportunities. For an inclusive growth strategy in countries like Viet Nam, the active promotion of competitive medium-technology sectors, particularly in component producing clusters, is likely to be essential.

The development of competitive capabilities in new sectors, including medium technology ones, requires addressing several 'contracting failures' (market failures) that can constrain investments in these new sectors. Many of these market failures are well known but policy can be inadequate as a result of **two types of problems**:

- First, **policy may have limited effects if it targets the wrong or less important market failures.** In particular, policy in

developing countries often fails to address the market failures constraining investments in developing technical and organizational capabilities in firms. These capabilities are critical for ensuring the emergence of competitiveness but are also extremely difficult to develop through investments organized by private contracting alone.

- Secondly, even when policies address important market failures, the **policy design may be such that the necessary conditions for success cannot be enforced given the political and institutional environment of the country.**

We describe the second as a 'rent management problem'. Any policy support provided to firms to encourage the development of new areas of competitiveness creates new streams of income for the supported stakeholders that can be described as 'rents'. However, competitive firms are only likely to emerge if the allocation of these rents is conditional on the recipients meeting specific conditions. If these conditions are not properly identified or enforced, outcomes are likely to be poor (see Box 2). The capacity of a state to identify and enforce the conditions necessary for the success of particular policies can be described as the rent management capabilities of that state with respect to the implementation of those particular policies. All states are not equally good at enforcing all types of conditions. The policy challenge is to devise policies whose conditions for success are potentially enforceable by a particular state, given the specific institutional and political constraints it faces.

## **Box 2 Technology Policies Compared: India and South Korea**

The success of 'technology policies' (sometimes described as industrial policies) that developed new sectors and capabilities in South Korea is well known, but very similar strategies fared less well in other countries like India and Pakistan. The dual problem of targeting the most important market failures and ensuring that the policy is effectively implemented can explain these significant differences in outcomes.

In India, many years of planning and protection did build up capabilities in different sectors but not fast enough to develop globally competitive sectors. This was partly because the dominant instruments of licensing and planning primarily attempted to coordinate investments in leading strategic sectors and did not address the much more important problems of developing the competitiveness of firms. The most important problem in India at that time was that firms in all sectors lacked the technical and organizational capabilities for achieving international competitiveness. This is still the most important problem in many

developing countries. Some industrial policy instruments in India, like tariff protection and other implicit subsidies did indeed provide resources to firms to engage in capability development. These instruments allowed learning-by-doing as firms engaged in production in new sectors. The automobile, iron and steel, and engineering sectors in India developed considerable capabilities during the 1950s and 1960s as a result.

Capabilities, however, did not develop fast enough for most of these sectors to achieve global competitiveness. This part of the failure was due to policy design being inappropriate for the political and institutional conditions in India. Indian firms receiving these types of support proved to be very difficult to discipline and the state could not withdraw subsidies from firms that failed to achieve competitiveness (Chibber, 2003; Khan, 2011). As a result, Indian firms did not face credible compulsions to increase their productivity, productivity growth was slow and policies supporting capability development eventually began to be abandoned in the 1980s.

In contrast, the instruments providing support to emerging firms in South Korea had credible conditions that firms knew they had to fulfil, otherwise they would lose their subsidies. These conditions, including export targets, could be enforced in the political and institutional conditions of contemporary South Korea, and companies that failed to achieve targets actually lost their subsidies.

The challenge for countries like India (and Viet Nam) is to construct policy instruments that address the most important problems constraining the emergence of competitive sectors, and to provide the support with conditions that can be enforced in their political and institutional contexts. We argue that this is possible, but requires a rethinking of the policy-making process.

The experience of policy implementation in Viet Nam suggests that the design of policy aiming to upgrade productive capabilities has in many cases ignored the actual implementation capacities (rent management capacities) of the state. In this sense, the Vietnamese experience is closer to that of countries like India (Box 2), as many supported firms and sectors did not become competitive, suggesting that appropriate and credible conditions could not be imposed on the firms receiving support.

Viet Nam has had a variety of policies to promote technology acquisition and competitiveness in different sectors. Some of these policies have arguably encouraged investments and growth in some sectors but there has been more limited success in promoting the development of new competitive firms and sectors that could sustainably drive growth beyond the period of policy support. The paper discusses why the emergence of competitive sectors has been slow and the ways in which policy may respond to these challenges.

## Outline of Report

- In **Section II** we discuss the conditions that effective policies supporting inclusive growth must satisfy.
- In **Section III** we discuss the most important 'contracting' or market failures that constrain the emergence of competitive industries. Of these, a particularly important one is the difficulty of organizing investments in learning-by-doing to develop the firm-level capabilities required for competitive production.
- In **Section IV** we discuss some specific characteristics of Viet Nam's institutional and political context that have constrained particular types of policies and enforcement strategies.
- **Section V** discusses some of the experiences of policy implementation in the garments and textiles, automobiles and electronics sectors in Viet Nam.
- **Section VI** draws the discussion together to look at some of the policy options for supporting inclusive growth in Viet Nam.

## II. Policies for Developing Competitiveness in New Sectors

Inclusive growth requires policies that can help a wide range of competitive sectors to develop, creating new entrepreneurial opportunities, employment growth and rising wages. **The types of technologies that are most likely to do this can be broadly described as ‘medium’ or intermediate technologies, that are neither very capital- and skill-intensive, so that access is not limited to very few entrepreneurs and workers nor so low-tech as to generate very low wages and wage growth.** Clearly, the industries included in medium technology sectors are likely to be different in countries at different stages of development. In a rising middle-income country like Viet Nam, a wide variety of sectors and technologies can be in the intermediate technology sectors, including a wide variety of component industries in electronics, engineering and automotive parts, but also advanced garments and textiles.

Supportive policies are required for promoting these sectors if private initiatives are not resulting in their rapid growth. **The reasons that may constrain private initiatives in these activities can be broadly described as contracting or market failures.** If the development of some sectors and technologies can add net benefit to a society, and if the resources necessary are potentially available, the failure of these sectors to develop is likely to be due to various types of contracting failures. Investors and other stakeholders are only likely to engage in these activities if they can ensure that the conditions

required to make their investments profitable can be enforced. If not, the investments will not be forthcoming. **It is important to identify the precise reasons behind these contracting failures because the design of the policy support can be quite different for different problems.**

There are **two broad types of policies** for addressing market failures affecting the development of new businesses. Both are sometimes referred to as technology policies or industrial policies. **‘Horizontal’ policies attempt to improve general conditions for doing business by improving the efficiency of markets and contracting and improving the supply of critical public goods and infrastructure.** The aim is reduce market failures for all business sectors. But in general, and in particular in developing countries, many market failures are likely to remain even after the implementation of horizontal policies supporting business. As a result, successful countries have in addition had **‘vertical’ or targeted technology policies that addressed particular contracting failures affecting investments in particular sectors or technologies** (see Box 3) (Khan & Blankenburg, 2009). Vertical policies are sometimes wrongly criticized for being discriminatory or involving judgements about ‘picking winners’. In fact, the distinction between the two is not very sharp, and the real distinction is about the effectiveness and relevance of the policy framework for solving particular problems.

### Box 3 Horizontal versus Targeted Policies for Promoting Business

Examples of horizontal policies for promoting business include improving the conditions for ‘doing business’ as defined by the World Bank measurement of the ease of doing business in different countries (World Bank & International Finance Corporation, 2013). Most developing countries have strategies of improving these conditions, including reduction of red tape,

simplifying procedures for registration of businesses, paying taxes, getting utility connections, and so on. In principle these measures reduce the costs of setting up and operating businesses, and should therefore help new businesses to start up.

However, these strategies are rarely sufficient for ensuring sustained growth in developing countries. Different sectors and businesses typically face very specific problems, and policies that address these specific problems are targeted policies. Developing countries therefore typically also have targeted/vertical policies for promoting business that address problems facing particular sectors or types of firms. More successful countries are typically more successful in designing and implementing vertical policies, and this explains why they are more successful in sequentially developing new firms and sectors and thereby spreading growth. Examples include South Korea's policies providing subsidized finance and export subsidies to export-oriented sectors and *chaebol* in the 1960s, or China's policies providing cheap credit, targeted infrastructure and tax breaks to particular sectors identified in industrial policy priorities from 1989 onwards (Amsden, 1989; Lu, 2000). A country's capacity to design and implement targeted support policies is therefore critical for sustaining growth.

One argument for horizontal policies is that they are non-discriminatory and therefore do not involve policy-makers making judgements for or against prioritizing particular sectors. In reality, this argument does not hold because all policies discriminate in favour of or against particular individuals, sectors or firms in some way. For instance, even apparently horizontal policies are actually discriminatory if firms or sectors face very different constraints, and if the horizontal policy ignores these differences. A policy that fails to recognize differences in the types and intensities of problems across sectors is effectively discriminating against sectors with more severe problems. Conversely, policies that identify priorities across sectors or regions and then sequentially address them may help to create a more level playing field over time. In that sense, they may actually be more 'non-discriminatory'. Note that horizontal policies are not necessarily 'picking winners'; they may simply be sequentially addressing sector-specific constraints. Obviously not all problems, whether they are general or particular, can be feasibly addressed by policy. **The real question is whether the priorities identified can be effectively addressed.**

Clearly, some policies are more horizontal in the distribution of benefits across firms and others are more targeted and therefore more vertical. Truly horizontal policies that do not discriminate between any firms or sectors are difficult to imagine, and **highly targeted strategies that benefit very few firms are likely to be captured and may be strongly opposed by other interests in society.** The relevant choices are likely to be between policies located in the middle of the horizontal–vertical spectrum. When we look at this range, there are no compelling theoretical reasons why policies that are somewhat more 'horizontal' will always perform better in terms of social objectives like supporting inclusive growth. The experience of successful technology policy in countries like South Korea and Taiwan shows that they sequentially targeted specific technologies, regions, and contracting problems. These policies ranged from the industrial policy instruments of South Korea and Taiwan in

the 1960s and 1970s that targeted particular sectors and industries, to the region-specific incentives and provincial competition in China in the 1980s and beyond (Amsden, 1989; Qian, 2003; Qian & Weingast, 1997; Wade, 1988, 1990; World Bank, 1993). **The distinguishing characteristics of successful policies were that they identified and targeted the most important problems, and were implementable and enforceable in their political and institutional contexts.**

It is important to point out that successful policies for developing competitive sectors do not require states with the vision and the capacity for 'picking winners'. This metaphor is unfortunate because it implies that successful technology policy requires wise bureaucrats whose vision of the future is particularly prescient. Since bureaucrats and politicians clearly do not have such abilities, it may be wrongly concluded that targeted government support for inclusive growth policies is best avoided. The reality is that even the dramatically successful East Asian countries did not have such bureaucrats. The difference was rather that the policy instruments that emerged in East Asia could be enforced in their specific political contexts, and could be altered in the light of evidence. This enabled mistakes to be corrected and new experiments to be initiated.

The effectiveness of policy depends on two interrelated questions. First, does it identify the right problems and secondly, is the design of the policy appropriate for the political and institutional context of the country? The first question in turn has several dimensions. First, policies can fail simply because policy-makers have multiple objectives and may be attempting to achieve too many goals with a limited set of instruments. For instance, a policy that aims to achieve competitiveness through productivity growth can fail if policy-makers also want to protect employment in the firms and sectors being targeted. Multiple objectives require packages of policies targeting different problems because of these types of trade-offs. If productivity growth requires a particular firm to lose some employees, other policies should support the relocation and retraining of affected workers and support the development of alternative employment opportunities.

A more important aspect of the first question is that many different types of contracting failures can constrain the emergence of competitiveness in new sectors. Policies that may have been appropriate if the constraint was due to one set of problems may be inappropriate if the more important problem was a different one. For instance, policies that target insufficient skills may be irrelevant and even wasteful if the main problem was that firms lacked the organizational capability to achieve competitiveness. These problems may also be quite difficult to identify using simple survey techniques. If firms are failing

to achieve competitiveness because they have low internal organizational capabilities, their managers may be unaware of the problem or unwilling to admit to it, and instead they may be very likely to attribute their low competitiveness to poor worker skills or other constraints. But if low firm-level organizational capabilities were the more important problem, the expenditure of public resources in skills training may end up creating an additional problem of unemployed skilled labour on top of the already existing problem of uncompetitive firms. **Policy-makers therefore clearly need to have a careful analysis of the causes of low competitiveness because superficial assessments and survey evidence may be misleading.**

The second problem is that technology policies can also fail even if the problems have been correctly identified, if the particular instruments chosen to address these turn out to be ineffective in the political and social context. This problem has resulted in many failures in Asian industrial policy. Every society has a specific economic and political structure that can be described by the capabilities and the distribution of power across different types of organizations. The relative bargaining power of different types of firms, government agencies, and other stakeholders can vary greatly across countries given their initial conditions. We describe the distribution of organizational power as the 'political settlement' of the country (Khan, 1995, 2010). Features of the political settlement matter for the enforcement of technology policy because policy typically

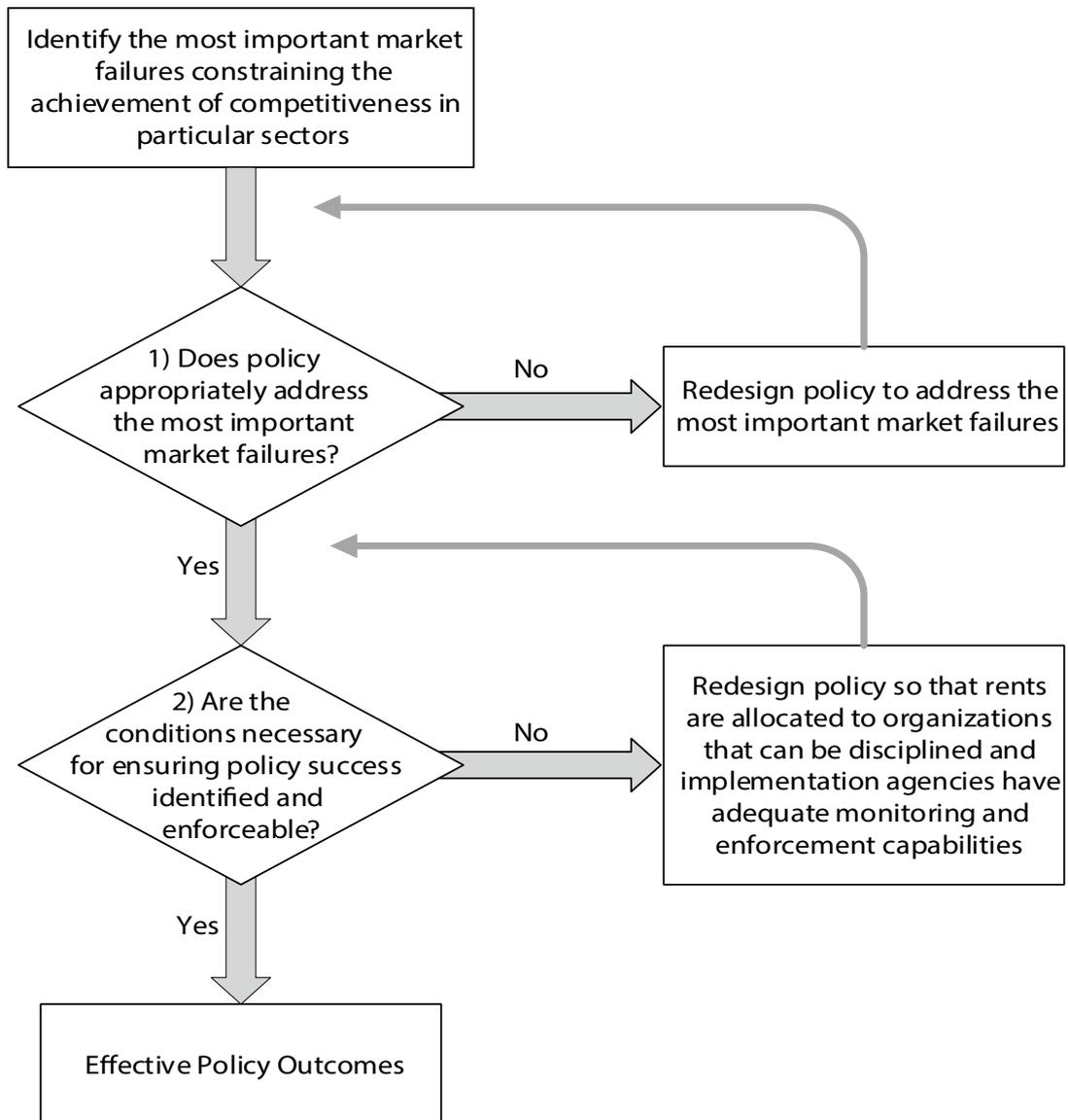
provides explicit or implicit policy support (rents) to particular firms or sectors conditional on the achievement of desired outcomes. The results of the technology policy (or indeed of any policy in general) depends critically on how effectively the state can monitor the outcome that is desired, and change the allocation and terms of support in the light of emerging results. **Case study evidence shows that the effectiveness of monitoring and enforcement depends only partly on the technical capabilities of state agencies doing the enforcement and much more on the relative bargaining power of these agencies vis-à-vis the types of firms receiving the rents** (Khan, 2009, 2013a; Khan & Blankenburg, 2009; Ngo, 2013).

Cases of policy failure of this type are generically described as government failures. Liberal economists have argued, often justifiably, that targeted technology policies should be abandoned because the costs of the government failure may be more significant than the market failures they were trying to address (Krueger, 1990). Indeed, **experiences with failed strategies of supporting particular firms and sectors in Viet Nam have sometimes also led to voices arguing against support policies and in favour of greater reliance on free trade agreements to drive the development of competitiveness in the country.** This type of reasoning has led some

policy-makers and economists to support the WTO, the TPP and other free trade agreements, for instance as ways of reducing the discrimination against domestic private firms (Perkins & Vu-Thanh, 2011). As a response to inefficient rent capture, this type of policy response is very understandable, but inadequate. Clearly, if some support policies have been wasteful they should be abandoned or modified. However, if we simply abandon vertical support policies and rely entirely on horizontal support policies, important market failures may remain and may prevent a broad-based development of competitiveness. The only feasible option is actually to redesign targeted policies better, with greater attention to implementation conditions. This does not preclude support for measures that also seek to increase competition and trade.

The two related but logically separate steps in effective policy design are summarized in Figure 1. **Policies can fail if either the policy design ignores the most important market failures constraining the achievement of competitiveness or the policy design delivers rents to organizations with conditions that cannot actually be credibly enforced in that political and institutional context.** Both types of problems can potentially be addressed by better policy design.

**Figure 1 Two Necessary Steps in Effective Policy Design**



# III. Market Failures Constraining the Development of Competitiveness

Using the framework outlined in Figure 1, we now look at the different problems constraining the emergence of competitive firms and sectors, and what policy can do to address these problems. In this section we look at the different problems (market failures) that may constrain the development of new firms and sectors, and in the next section we look at the problem of policy design for effective implementation in different political contexts. While there are many potential problems that affect the development of competitive new medium technology sectors, such as missing skills, the problem of coordinating investments across sectors and so on, we argue that **the problem of developing firm-level organizational capabilities is a particularly important constraint that has not been sufficiently recognized in policy design.** We look at the more important market failures in turn.

## 1. Investments in Formal Skills

The difficulty of achieving competitiveness in many sectors is often attributed to the low levels of skills of the workforce. Investments in training and skills may in turn be constrained by market failures if investments in skills are subject to positive externalities. This can justify various public policies of supporting investments in skills. The market failure is that the private investor in skills cannot capture enough of the benefits from this investment and the result is under-investment. For instance, if employers are considering investing in the skills of their workforce, they may fear that workers may not remain with the firm for long enough to enable the firm to recover its investments through higher productivity. Contracting with workers to stay with the firm for a number of years after the training may be difficult to enforce, and this may make firms unwilling to invest in skills to the full extent. Similarly, workers too may not want to invest in skills that are of benefit to a particular employer because employers may not be able to offer a credible contract keeping them in their

jobs for long enough and at a high enough wage, and the particular skills may not be equally valued by other employers. The majority of employers surveyed by the World Bank in Viet Nam identified skills gaps and skills shortages as a constraint (World Bank, 2013).

**If the absence of skills is an important problem in a sector, the obvious policy response is to share some of the training costs or provide training through publicly funded training organizations. The first problem is therefore to identify whether the absence of skills is indeed an important problem in a sector.**

This may be quite difficult to determine in many cases. If employers facing low competitiveness are surveyed, they are very likely to attribute their problems to low worker skills. But they may not necessarily be right. Skills shortages may not be the primary cause of low productivity and competitiveness in many sectors. In every sector there are likely to be particular gaps in formal skills, for instance in areas like accountancy, engineering and computing. But the more general problem for developing countries is that even workers who have the appropriate formal skills still register low productivity because the employing firms do not have the 'organizational capabilities' to organize high productivity production. These organizational capabilities are also skills in a broad sense, but they are tacit 'skills' that are embedded in organizational routines, and the production team cannot learn these skills in formal training programs. We discuss this constraint separately later.

We know from international evaluations of training programmes in developing countries that it is difficult to ensure that they produce higher productivity employees at the end. For instance, a World Bank review of a large number of evaluations of training programmes concluded that training programmes generally did not have a high impact on raising wages (a measure of increased productivity) though there was some impact on employment. But performance was even

poorer in developing countries. In all cases, on-the-job training and employer involvement was critical for achieving success, which is consistent with our argument about the importance of tacit skills acquired through learning-by-doing (Betcherman, Olivas, & Dar, 2004, p. 53). In the sectoral Vietnamese case studies in this paper we found evidence consistent with these findings about the difficulty of organizing effective formal training programmes, for instance in the garments industry.

Two points need to be kept in mind when designing policies for skills development. First, as already mentioned, the most pressing skill deficit in developing countries is usually the absence of tacit knowledge embedded at different levels of an organization about how to efficiently organize production processes. This is typically not an individual skill and not one that can be easily remedied through formal training. It should not be confused with 'management' skills, if the latter is understood as formal skills taught in management schools. Firms have to develop their organizational functions along different dimensions to maximize the speed with which inputs are converted into outputs, ensure that waste is minimized, product quality maintained, and so on. The processes for enhancing these tacit organizational skills are very different from those required for enhancing formal skills. The first requires the financing of on-the-job training and experimentation with organizational design, the second requires formal training in appropriate educational establishments. Secondly, in the absence of appropriate strategies for enhancing tacit knowledge, strategies for enhancing formal skills are likely to result in increased skilled unemployment and perhaps an out-migration of skilled workers.

Most manufacturing processes in developing countries actually require fairly basic prior knowledge of the technology of production by the majority of the workforce. This is true for blue collar workers in sectors like textiles, electronics and light-to-moderately-heavy engineering. **What is often required is not the acquisition of formal skills through training in external institutes (though this can help to some extent), but the development of the productivity of the workforce by making the production team work together in a more organized way. These tacit capabilities can only be learned through firm-level experimentation with different organizational structures, supervisory structures, incentive structures and so on.**

Developing countries often make the mistake of responding to low competitiveness by assuming that the problem can be solved by investing more in formal skills training, only to find that the expected improvements in productivity and competitiveness do not materialize. **Indeed, one of the paradoxes of developing countries is that they regularly export skilled workers who could not be competitively employed in their own countries, but whose productivity jumps by orders of magnitude once they join a firm in a more competitive country or region** (Clark & Wolcott, 2012).

The answer to the paradox of migration is that workers have low productivity in their home countries or regions because firms do not have the organizational capabilities and routines for organizing efficient production. But as soon as these workers migrate and join an efficiently run organization in another country or region, they quickly learn the required organizational routines on the job (by observing other workers) and their productivity jumps several times, showing that the problem was in many cases not the absence of formal training, but of knowledge and know-how of a different kind. Clark and Wolcott (2012) report productivity differences of more than 600 percent between workers in the United States and India who have similar formal skills and who are using identical machinery!

Differences of this magnitude cannot be due to the skills of individual workers and show that the organization is not using its workforce effectively. If aggregate output is low because of wastage of inputs, downtime of machinery, rejection of output because of poor quality, stoppages because of poor inventory or order management, all these show up as low productivity of workers but it does not mean these problems can be addressed with greater investments in skills. **We cannot always deduce from the low measured productivity of workers that they lack specific skills that can be taught through a training programme.** The problem may instead be a missing set of tacit skills informing the organization of production, and these have to be acquired through learning-by-doing. We will discuss this constraint later. Of course, once competitive sectors begin to take off, formal skills shortages of specific types soon emerge that have to be addressed. Indeed, for some categories of formal skills, such as accountancy, computing skills or mechanical engineering, there may be genuine shortages even at the initial stages of sectoral development, depending on the types

of industrial processes being attempted. The first step in the diagnosis suggested in Figure 1 for this particular problem is therefore to assess the extent to which specific skills shortages are actually the problem. This would involve going beyond the perceptions of managers and would involve looking at the formal skills of workers in more competitive firms both within the country and internationally, focusing on countries at similar levels of development. The aim would be to empirically examine if higher productivity firms did actually have workers with significantly higher levels of formal skills, and in which areas.

It is clear from the *World Bank's Skilling up Viet Nam* report that there are formal skills shortages in particular areas, particularly for more advanced technicians (World Bank, 2013, p. 53). The World Bank study found that these formal skills shortages have been difficult to address because of poor information about where specific skills gaps exist, weak incentives on the part of students and workers to acquire these skills and weak capacity on the part of educational establishments to meet these needs (World Bank, 2013, pp. 116-128). However, the World Bank's approach in that report is a holistic one, looking at how the educational system from the primary level onwards needs to be reoriented for a modern market economy. Our concern is to identify immediate constraints on employment generation. If we accurately identify that part of the problem of low competitiveness in a sector is indeed the absence of specific formal skills, the second step in terms of Figure 1 is to examine whether proposed policies for formal skills development link the support provided to the achievement of success and government agencies have the capacity to enforce appropriate conditions on the organizations receiving support. This requires a careful consideration of the monitoring and enforcement requirements of that particular policy given the enforcement capacities of government agencies in that country. Policy support for training programmes can be delivered in different ways, with rents being allocated to different types of organizations and the success of each depends on the capacity of the state to enforce the appropriate conditions for that particular policy.

This argument can be illustrated by considering different types of skills support programmes. One possibility is to provide financial support or tax breaks directly to firms investing in training. This is one way of delivering the required 'rents' but this policy will fail if firms provide poor quality training after receiving support or use the

support to reduce their costs without providing much training. Support for skills using this policy instrument will only be effective if training outcomes can be clearly defined and monitored and if appropriate penalties can be imposed on firms if they fail to meet these conditions. Policy can fail if the conditions are not clearly defined or if the monitoring and enforcement agencies have insufficient enforcement capabilities vis-à-vis the types of firms being supported. Clearly in some contexts this method of supporting skills is unlikely to be effective and alternative mechanisms have to be considered. A second possibility is to subsidize training institutes providing the relevant training so that workers or employers can access the relevant training at a much lower cost or for free. For this strategy to succeed, government agencies have to be able to identify the courses that have a market value for future employers and they have to monitor the quality of teaching with penalties for training institutes that fail to meet these criteria. Again, appropriate criteria for success and failure have to be identified, outcomes have to be monitored and incentives and penalties effectively applied. This too may be more or less feasible in different contexts, given the capabilities and bargaining power of training institutes and the agencies charged with monitoring them. Other policy alternatives include providing training subsidies directly to employees, or setting up training institutes under public ownership. Each of these solutions has specific conditions that need to be monitored and enforced. The most effective policy design will depend on the conditions that are most likely to be enforceable in a particular context, given the characteristics of the organizations involved and the enforcement capabilities of government agencies.

## 2. Innovation and Accessing Advanced Technologies

Investment in innovation and the acquisition of technologies embodying innovation may be constrained if intellectual property cannot be protected. The problem here is that innovation can be imitated and, if this happens too rapidly, the innovator could earn an insufficient return, which may deter further investments in innovation, or reduce the willingness of innovators to allow their technologies to be used in particular countries. Private contracting solutions to prevent imitation are unlikely to be effective and this contracting failure requires effective public policies. There is

an extensive literature on how this contracting failure can be addressed by protecting intellectual property rights, which results in extra profits for innovators known as Schumpeterian or technology rents (Dosi, 1988; Khan, 2000). The implications of preventing imitation are obviously different for innovators, imitators and consumers. Longer periods of protection benefit innovators but hurt consumers and developing countries attempting to move up the technology ladder. So there is a trade-off between the benefits of faster innovation that comes from protecting the returns of innovators and the losses of consumers and developing countries attempting to catch up. This means there is an optimal period of protection of technology rents, and the optimal period may vary across sectors and technologies. It is also recognized that excessively long periods of protection can actually slow down the pace of innovation by making it difficult for new innovators to build on previous innovations (Stiglitz, 2007, pp. 103-132).

While advanced countries largely rely on innovation to drive growth, a significant part of growth in developing countries is based on the adoption and adaptation of existing technologies. Although innovation is undoubtedly taking place in many developing countries, most of their growth comes from adopting and adapting already existing technologies. East Asia's high growth in the 1960s and 1970s was based on the rapid transfer and imitation of existing technologies. The emergence of trade-related aspects of intellectual property rights under the World Trade Organization and other intellectual property rights protection agreements have affected this process of adoption by slowing down the pace at which imitation can take place, and ruling out the imitation of the most advanced technologies. Given the international governance architecture protecting technology rents, such as the 1994 agreement on trade-related aspects of intellectual property rights (TRIPS), developing countries have to credibly protect intellectual property rights if they want to attract global companies to invest (Hoekman, Maskus, & Saggi, 2004).

**Over the longer term, however, intellectual property rights agreements have made technology transfers to domestic companies more difficult and this could constrain broad-based national development** (Cimoli, Coriat, & Primi, 2009; Stiglitz, 2007). In the long run, developing countries may have to revisit the appropriateness of these agreements. But in the

immediate future, developing countries may have no option but to protect intellectual property rights to be able to attract foreign investments. The policy question under these conditions is about the types of foreign investments that the developing country should invite. **Given that any direct imitation of the technology is precluded by intellectual property rights agreements, the developing country should ask whether the technology in question allows backward and forward linkages to domestic medium-technology firms as subcontractors and component suppliers.** If the foreign technology is so advanced or so tightly controlled in terms of its international supply chain that there are limited spillovers to domestic medium-technology firms, this may not be the best type of technology to attract. These considerations are relevant for Viet Nam in several sectors including electronics where the higher end foreign investments may be so advanced that there are limited opportunities for domestic spillovers. These links between government policies that aim to attract particular types of FDI, with government policies that develop appropriate levels of local firm capabilities were discussed in Box 1.

**The policy questions here in terms of Figure 1 are first to determine the extent to which there are impediments to the attraction of the most desirable technologies, and then to devise policies that are most likely to be effective in the spread of these technologies to create inclusive growth.** Innovation and frontier technologies are unlikely to be the dominant drivers of growth in middle income countries like Viet Nam. **The policy question is to select the advanced technologies that have the biggest potential of supporting the development of medium-technology component suppliers in the country concerned.** This means that the policy position cannot just be to protect intellectual property rights. The more important policy question is about the appropriate higher technology investments that a country like Viet Nam should promote, and this should be determined by identifying the linkages between particular high technology investments and feasible developments of medium-technology component providing clusters in the local economy. The latter could contribute to the goal of inclusive growth.

**Policy should then focus on how to provide additional incentives to the high-technology sectors that can most effectively support inclusive growth. The**

**second part of policy design in terms of Figure 1 is to ensure that incentives to foreign investors for both locating in Viet Nam and for subcontracting to local component suppliers are provided with enforceable conditions that ensure that the support is not captured by foreign investors without the desired investments or subcontracting taking place.**

The design of the support strategy is likely to be very specific to the particular projects being considered. The incentives that have to be offered and the conditions that the foreign investor has to credibly fulfil will depend on the companies and technologies involved and the monitoring and enforcement capabilities of the Vietnamese state. Thus, general incentives for foreign investors without the specification of enforceable conditions, or a general strategy of protecting intellectual property rights are unlikely to be sufficient as a policy for attracting high-technology investments with spillovers to domestic component producers.

### 3. Coordination Failures

Development economists have long recognized that private contracting may fail to coordinate investments across sectors and this can constrain the emergence of competitive sectors if there are demand or supply side complementarities between them (Murphy, Shleifer, & Vishny, 1989; Nurkse, 1953; Rosenstein-Rodan, 1943; Scitovsky, 1954). The efficiency attributes of market prices as signals of social costs and benefits can break down in the presence of complementarities, making private contracting inefficient. As a result, market prices may suggest that an investment in a particular firm or sector is unprofitable but in fact the investment may be profitable if complementary investments in other sectors could be simultaneously negotiated. In developing countries, this has been the justification for planning or coordinating industrialization strategies. This includes coordination of public investments in infrastructure as that can induce locational clustering. It also includes policy incentives for different sectors to induce clusters of related industries to set up. However, the governance requirements for achieving coordinated industrialization are quite significant and few developing countries have the requisite governance capabilities. The experience of development planning in the 1960s and 1970s in developing countries like India and Pakistan shows that it is not enough to produce sophisticated plan documents showing the interrelationships

between sectors and the investment priorities for different sectors and regions. Converting the document into coordinated investments on the ground have generally proved to be much more difficult.

To achieve successful coordination, the relevant government agencies must themselves be coordinated and they have to be able to identify the sectors to coordinate on the basis of objective data and analysis, without being influenced by special interests. The agencies in charge of the coordinated planning must also have effective control over financing and implementation to convert the plan documents into actual investments, and they must have the monitoring capacity to ensure that resources are not wasted. These are demanding requirements for planning and coordination agencies in developing countries. In Viet Nam, the coordination of public investments has often been weak, particularly across provinces. It has been argued that too many ports, airports and industrial parks have been constructed, sometimes failing to achieve minimum efficient scale, or suffering from excess capacity (World Bank, 2011, pp. 53-75). Very often this was because of the nature of competition between provinces in Viet Nam that resulted in poor coordination of infrastructure investments across provinces. **Competition between different regions of a country can drive efficient infrastructure investments if the regions or provinces are large, as in China.** In such a context, investments in infrastructure in one province can induce competitive investments in another without producing underused infrastructure capacity in the first. But in Viet Nam, the provinces are relatively small and parallel investments in neighbouring provinces can result in underused capacity or the construction of too many small ports that do not achieve minimum efficient scale. In smaller countries, greater coordination of infrastructure investments is required across provinces and regions to ensure efficient investments.

Furthermore, to effectively coordinate private investments, the state's planning exercise has to be aligned with the interests and capabilities of investors in the private sector. There have been many failed attempts to develop industrial clusters and industrial parks in both developed and developing countries. Even in Japan where the planning capacities of national and local governments are fairly advanced, the Japan Regional Development Corporation over-invested in the construction of industrial parks

in the 1990s with a significant waste of public resources (Sekizawa, 2009). The risk of wasting resources can be reduced if governments follow the demand coming from private investors rather than attempting to direct investors to locate in particular sectors or regions chosen by government. For instance, industrial parks are much more likely to be successful if the government complements private investments, with private investors pre-committing their own funds to invest in the park at the outset and the government providing complementary resources. This was the strategy followed by the Indian government in the relatively successful programme of constructing textile parks in its Scheme for Integrated Textile Parks (SITP) that was initiated in 2005. In this scheme the government co-financed some of the costs of constructing the parks, but the design of the policy ensured that end-users were involved from the outset and had to invest their own money at the same time to ensure real market demand for the facility. This ensured that there was a higher probability that the right firms and locations were selected (Saleman & Jordan, 2013).

Effective and successful coordination of infrastructure and other investments is difficult to achieve as they involve solving difficult problems of agency coordination, particularly across different agencies, sectors and provinces. However, there are also many less difficult problems of coordination that can be usefully addressed. For instance, **government agencies also have to ensure that different policies and incentives are coordinated so that they do not cancel each other out.** For instance, if a policy objective is to provide firms in a sector with temporary support using tariffs or taxes on imports, it is important to ensure that other agencies do not wipe out this support by imposing tariffs or other taxes on the inputs used by these firms. In our case study of the automobile industry in Viet Nam, we find examples of such policy coordination failures. This type of coordination is relatively easy to achieve, but may still involve coordination across agencies that may not be willing to concede on their own priorities and instruments.

The first question here in terms of Figure 1 is therefore to identify the coordination failures that are limiting the development of medium technology sectors and that it is feasible to try and address given the governance and coordination capabilities of the state. Once an important but feasible set of coordination problems are identified, the second question is whether

policies can be designed better to address these problems given the monitoring and enforcement requirements of successful implementation. The example discussed earlier about designing policy for investment in industrial parks that coordinates with private investors early on is a case in point. More ambitious coordination, such as infrastructure or industrial investment across provinces may be politically quite difficult to achieve in Viet Nam in the short to medium term, and this coordination failure may not even be a fundamental constraint on inclusive growth at the moment. Finally, better coordination across agencies setting different taxes and tariffs, or regulatory conditions could be important even in the short to medium term, and better coordination can arguably be achieved here. **The policy challenge here is for higher level agencies to identify the different parts of a policy package that affects investment incentives in particular sectors and to coordinate the incentives and the conditions attached to them across agencies.** Different agencies are likely to try and defend their autonomy. But if higher-level agencies can identify that the policy package offered to particular sectors by different agencies are contradictory, then even signalling this to the agencies concerned may be a useful service.

## 4. Learning and Organizational Capabilities

The most important constraint on the development of new competitive sectors in developing countries is frequently the absence of a broad base of firms with the potential organizational capabilities to adopt, adapt and use available skills and technologies in these new sectors profitably. This problem is different from and should not be confused with the absence of formal skills. Firm competitiveness depends on the whole firm working together effectively as a team, and the productivity of individual workers depends critically on how effectively or otherwise the team as a whole is working (Alchian & Demsetz, 1972). The critical characteristic of a team is therefore that the productivity of individuals within the team is only partly determined by individual levels of skills, and depends to a much greater extent on the collective organization of the team. An individual's observed productivity can be high or low depending on the type of team that the individual is in. Although this is self-evident in the real world, economists often ignore the problem

of organizational capabilities. **The productivity of an individual worker depends to some extent on the skills of that worker, but to a large extent it depends on how well the team or organization is collectively working.** The productivity of an individual worker is critically affected by the flow of production through the factory, the management of quality control, the management of inventories and input wastage and so on, most of which are firm level organizational questions that the individual worker cannot significantly affect.

These organizational characteristics of the firm are embedded in the routines of the firm and the routines themselves are acquired through learning-by-doing by the team as a whole. To be effective, the learning-by-doing that actually increases team productivity also requires team leadership that can use opportunities for learning to experiment with new organizational designs and new systems of internal monitoring, supervisory and incentive structures and other organizational initiatives to improve collective productivity. Over time, firms can dramatically improve their productivity through these measures. The organizational structure that will achieve competitiveness is usually not simply a copy of the organizational structures of other competitive firms in the sector or in more advanced countries. Each firm or country begins with specific initial conditions in terms of the habits of the local workforce, local infrastructural and governance conditions and so on, that will together determine the organizational structures that will work best in the local context. However, if the firm can observe the organizational design of a local firm that is competitive and begin to experiment with that as its starting point, it is likely to have to do much less adaptation than if it could only observe the organizational design of competitive firms in other countries, because the adaptations that are required are likely to be fewer in the first case. This is why clustering and learning happens much more rapidly when some local competitive firms already exist, than when an entirely new sector is being set up, even if the technology in question is old and the organizational design of competitive firms in other countries can be observed.

New firms in developing countries, particularly firms in new sectors, typically have low organizational capabilities, which simply means they have low capabilities of setting up the appropriate organizational structure for competitive production. As a result they have low

competitiveness even if they can acquire the most appropriate machines and have workers and managers with the formal knowledge required to use this technology. This is initially true even for low-technology production processes such as garments manufacturing, and much more so for more sophisticated medium and high technology products such as components manufacturing. The acquisition of required organizational capabilities is one of the most general problems that affect the growth of almost all segments of the technology spectrum in developing countries. The experimentation and learning-by-doing that are necessary for achieving these organizational capabilities are subject to important contracting failures. An investor financing a period of learning is only likely to make money if the team puts in a high level of effort in the learning and experimentation process. But this is contractually very difficult to ensure. Without a high level of effort in learning, there can be a lot of doing without much learning, productivity will then fail to improve and the investor will lose money. Investments in these learning processes are therefore unlikely to happen in the absence of appropriate supportive policies, but if policy is poorly designed, learning can once again fail with a waste of public resources.

It is difficult to overstate the potential importance of overcoming this particular constraint. If a country lacks firms that have the know-how to be competitive in global markets, solving other problems like ensuring the supply of skilled labour or coordination across sectors will not achieve any significant results. Labour with the appropriate formal skills will remain unemployed or migrate out, and policy coordination will fail to elicit new investments or job creation. When we look at countries like China that achieved significant growth, a critical characteristic was the rapid emergence of many competitive firms using intermediate technologies (see Box 1). These firms achieved competitiveness because horizontal and vertical policies supporting businesses enabled them to engage in learning-by-doing and the support came with enforceable conditions that compelled them to raise their competitiveness relatively rapidly. In contrast, countries where policies fail to ensure the rapid emergence of many firms with the appropriate organizational capabilities are likely to fail to achieve inclusive growth.

We can safely assume that there is a shortage of the appropriate organizational capabilities in developing countries and therefore that this

problem will have to be addressed by policy. The market failures facing investments in capability development means that in the absence of appropriate targeted policies, growth is unlikely to become broad-based or involve the emergence of new medium technology sectors. At a general level, the appropriate policy response to this contracting failure is for the government to share some of the risks and costs of financing the learning and development of organizational capabilities at the firm level. This support can be provided through a variety of policy instruments, including the temporary protection of domestic markets, the provision of temporary export subsidies and other types of explicit or implicit subsidies using credit policy, tax policy, land allocation policy or other instruments. Any of these types of policies potentially provide rents to particular firms and sectors, and can therefore serve as a policy for supporting the development of organizational capabilities in terms of the first question in Figure 1.

The second step in effective policy design in terms of Figure 1 is much more difficult to ensure in the case of policies supporting the developmental of organizational capabilities. Why is it necessary to impose conditions on firms to ensure that they put the requisite effort into the learning process? The answer is to ensure that supported firms feel compelled to put in a high level of effort in the learning process. This is the problem of disciplining referred to in Box 2. It may appear that disciplining the recipients of support should not be necessary, because the rational strategy for the leadership of a firm may appear to be to ensure high effort in learning anyway. The prize for the firm would be to achieve competitiveness and become self-sustaining. This motivation can sometimes work, but the evidence suggests that this can by no means be taken for granted. Indeed, there are good reasons why this is not necessarily the only or even the most rational strategy for stakeholders in the firm.

Support to firms to engage in learning-by-doing does not automatically result in productivity growth because learning and experimentation are costly exercises. Internal distributive conflicts have to be managed as hierarchies and responsibilities may have to be restructured frequently. In addition, the prize is not necessarily very attractive. The firm that puts a lot of effort into raising its productivity and achieves competitiveness through organizational learning is rewarded by losing its rent, as the policy support will end once it achieves competitiveness. Thus the successful

firm gains the dubious privilege of sinking or swimming in a competitive market. Without some degree of compulsion to do otherwise, the rational behaviour of firm managers may well be to 'satisfice', in the sense described by Herbert Simon (1956, 1983), and put more effort into 'political' rent-seeking activities to protect their rents. As a result, **if firms get support without enforceable conditions imposing costs on firms that fail to achieve competitiveness, the likely outcome will be a failure to achieve competitiveness** (Khan, 2013b, 2013c). When infant industries fail to become competitive despite years of support, it is almost always due to a failure of identifying and enforcing the conditions required for ensuring high levels of disciplined effort in developing organizational capabilities.

Most of the policy literature on capability development refers to the East Asian experience, particularly the Republic of Korea and Taiwan during the 1960s and 1970s, when the financing of learning-by-doing took place through significant ex-ante rents to firms, with enforceable conditions that ensured high levels of effort in raising competitiveness (Amsden, 1989; Lall, 1992, 2000, 2003; Wade, 1990). Support was given to firms in advance (hence the rents were *ex ante*) and firms that did not perform were later disciplined either through the market or directly by the government. However, for historical reasons, the East Asian economies had untypical political settlements that allowed the enforcement of tough conditions on domestic public and private sector firms receiving this type of support (Khan, 2009; Khan & Blankenburg, 2009). In the Republic of Korea, the *ex ante* support to large firms came in the form of low-interest loans, protected domestic markets and export subsidies but they came with credible sanctions if export targets were not met. The buoyant global markets at that time meant that export performance was a good indicator of effort in raising competitiveness. The political and institutional conditions in the Republic of Korea allowed corrective and sometimes punitive action to be taken against recipients of subsidies if export evidence suggested low effort in capability development. For instance, the state could not only withhold export subsidies if export growth was not achieved, it could also reallocate the ownership of a plant to a different *chaebol* if this was more likely to acquire the necessary organizational capabilities. Not surprisingly, the capacity to effectively enforce such conditions signalled to firms that they had to rapidly acquire competitive capabilities in order to survive, and the result was the rapid achievement of

competitiveness across a broad range of sectors.

Other developing countries, such as India and Pakistan, also attempted similar types of *ex ante* industrial policy support for infant industries in the 1950s and 1960s, but did not have capacity to enforce the conditions that could ensure high levels of effort in learning. As a result, many firms and sectors supported at that time never became competitive (Khan, 1999, 2011, 2013a). Fortunately, the East Asian models of centralized subsidy allocation are not the only ones that could support the development of organizational capabilities. The successful development of

competitive sectors in countries with other types of political and institutional structures (political settlements) shows that appropriately designed policy instruments can be effective, provided the conditions required for the success of the policy are compatible with the enforcement capabilities of the state (Khan, 2013b). The critical requirement is that these conditions create credible incentives and compulsions for high effort in developing organizational capabilities. This is borne out by examples of successful technology adoption in some economic sectors in Bangladesh, India and Thailand in the 1980s (Khan, 2009, 2011, 2012a, 2012b).

#### **Box 4 The Indian Automobile Industry: Developing Capabilities with 'ex post' Rents**

India's attempts to develop an automobile industry failed to produce a globally competitive auto industry until the 1980s. The support provided to domestic firms through market protection and other subsidies could not enforce conditions that ensured the achievement of global competitiveness. Political and institutional structures prevented the effective disciplining of firms receiving significant *ex ante* rents. In the 1970s India still produced only around 40,000 low quality cars for its domestic market. Dramatic changes came about through an accident of history in the 1980s. Prime Minister Indira Gandhi's younger son, Sanjay Gandhi, attempted to set up a modern automobile plant, but died in 1980 before this could take off. The Indian government took the plant under public ownership and looked around for a multinational partner to make the project work. As the Gandhi family's reputation was at stake, the government was keen to find a pragmatic policy solution that would produce a high quality car. The result was a joint venture between Maruti (the Indian public sector plant) and Suzuki (a Japanese multinational) that marked the beginning of a significant change in the design of policy for the automobile sector in India. The new policy design created opportunities and compulsions for capability development that were to have far-reaching effects on the Indian automobile industry. The results were dramatic. By 2015 India was producing more than 3 million passenger cars of global quality and competitiveness. India also became one of the few countries in the world that could competitively produce its own branded cars, like the Tata and the Mahindra, based on the emergence of a globally competitive Indian-owned components industry. What explains this dramatic turnaround?

The policy design that emerged with the Maruti-Suzuki partnership indirectly provided resources for financing the development of capabilities of domestic components manufacturers. But the policy design reduced the requirement of state enforcement of conditions for achieving successful outcomes to levels that were feasible within the Indian political settlement. This was achieved because the support was no longer provided *ex ante* but was rather an *ex post* prize to the foreign technology provider, conditional on the multinational raising the organizational capabilities of domestic component producers. Suzuki was offered the prize of being able to sell the new cars in the protected Indian market that enjoyed at that time a tariff protection of more than 85 percent (this was the *ex post* rent that Suzuki could collect), but only if it achieved 60 percent domestic content within five years. Thus, the only condition that the state had to enforce to achieve desirable results was that Suzuki would only be allowed to collect the *ex post* rent in the domestic market if the domestic procurement condition was met.

This was a credible condition given the political and bureaucratic capacities of the contemporary Indian state. This policy design created strong incentives for Suzuki to first invest its own time and resources to work with Indian component producers to raise their quality and productivity to levels that would be appropriate for inclusion in an essentially Japanese car meeting global competitive standards. The *ex post* prize was large enough, and the initial capabilities of Indian component producers were high enough, for this to be a profitable enterprise for Suzuki (Becker-Ritterspach, 2007; Khan, 2013c).

The results were dramatic. Maruti-Suzuki managed to capture 50 percent of the lucrative domestic market in a couple of years. Through the 1990s, the Indian government repeated this deal with a string of foreign auto companies, inviting them to get a share of the *ex post* rents in the Indian market provided they met specific domestic content targets. By the late 1990s the improvement in organizational and technical capabilities of Indian tier one component producers was great enough for them to start winning prestigious international quality prizes like the Deming Prize. Indian automobile companies like Mahindra entered the game as the presence of a range of Indian-owned components industries allowed Indian branded cars to be produced. **The Indian automobile story is thus an excellent example of the potentially virtuous links that can be set up between foreign technology brought in by a multinational and government policies encouraging the development of domestic component producers.** By 2012, the Indian auto industry accounted for around 7 percent of Indian employment and GDP. This huge contribution to inclusive growth would not have happened if a globally competitive domestic component industry had not emerged and if the Suzuki investment had been limited to assembling cars using imported components (Khan, 2013c). Moreover, this was relatively high-wage employment so the automobile sector not only created significant new employment opportunities, but also at higher than average wages. Finally, while growth in the Indian automobile sector faced many constraints, the critical turnaround clearly came with targeted policy instruments that created incentives for financing capability development in Indian component producers.

The specific policy instruments used in India at that time are not necessarily replicable in other countries (or even in India today), as tariffs and domestic content requirements are disallowed by WTO and other trade agreements. What is relevant is to understand the significance of policy design that can dramatically change outcomes by structuring incentives differently. The challenge in countries like Viet Nam is to devise policy support that creates incentives for foreign technology providers to invest in the development of domestic capabilities at appropriate levels of the supply chain that domestic producers could feasibly fill within relatively short periods of time.

Policy design matters because different policies allocate support based on different conditions, to different types of firms and the support can be delivered at different points in the development of competitive capabilities. The conditions that need to be monitored and enforced can differ depending on the design of the policy. Some states are able to enforce some conditions and not others, so it is critical to design policy keeping in mind both the nature of the problem that needs to be solved and the range of conditions that can or cannot be enforced by a particular state. The East Asian type of policy provided *ex ante* support to large companies, that is, support before the company achieved competitiveness. The point of the support was to enable the

company to engage in learning by commencing production operations even though it was not yet competitive. With this type of policy, companies have to be prevented from following a relaxed approach to enhancing competitiveness, and these states were successful because they had the capability to monitor performance and to withdraw support or even change the ownership and management of plant if performance was below target. Unfortunately, large companies in most developing countries have the capability of developing political and bureaucratic links with the state apparatus that make the effective imposition of these types of conditions quite unlikely. As a result, in the typical developing country, policies where all or most of the support

is largely provided *ex ante* are likely to achieve limited results in developing new competitive sectors.

Successes in capability development in countries where it was difficult to discipline large domestic companies had a very different policy design, and rents were allocated on very different terms and conditions. In one variant, which played an important role in the development of the Indian automobile industry (see Box 4) and the Bangladeshi garment industry, the policy rent was provided *ex post* to firms investing in the development of domestic organizational and technical capabilities. The rent was typically a prize to a foreign technology firm, whose job was to transfer not just the technology, but more importantly, the relevant organizational capabilities to one or more domestic firms. The *ex post* prize was large enough to induce the foreign firm to invest its own resources in developing the organizational capabilities of domestic firms sufficiently for it to claim the prize. The achievement of competitiveness on the part of the domestic firms was easy to observe in this policy design because the foreign firm was either buying components from the domestic firms whose competitiveness it had to improve (the Indian automobile case) or the foreign firm was selling inputs such as fabrics to domestic firms who would only be able to export if they were competitive (the Bangladeshi garments case).

Policy design can thus significantly reduce the monitoring and enforcement that states have to do to achieve successful outcomes. Moreover, since the foreign firms involved were first investing their own resources to raise the competitiveness of the local partners, they had strong compulsions to put in a high level of effort in working with local partners to help them achieve competitiveness. Finally, since the local partners (like the components producers in the auto industry example in Box 4) did not directly get any rents from the state, they could not use rent seeking to protect *ex ante* rents. If they failed to cooperate with the foreign company working with them to raise their competitiveness, they would have no prospect of enhancing sales and profits. The policy design thus aligned the incentives of the different partners to achieve competitiveness to a much greater extent than a strategy of *ex ante* rents to local companies, and this reduced the monitoring and enforcement requirements on the part of the state. Some monitoring and enforcement capabilities were still required, for instance to check if the conditions

for accessing the *ex post* prize had been achieved, but these requirements were much more in line with the actual capabilities of these states. Not surprisingly, success was dramatic, and new sectors with competitive capabilities actually emerged (Khan, 2013b). These examples show that the second part of the policy design process outlined in Figure 1 is crucially important to address if this market failure is to be successfully overcome.

In the new post-WTO policy context, what types of policy design could create similar incentives for foreign technology providers to assist in the development of component industries that could service their requirements? Clearly, the foreign multinational is unlikely to engage in these investments and put in the effort without a substantial return that would justify its costs. This return has to be in the form of a performance-related prize that has to be calibrated in terms of its magnitude and the conditions attached to meet specific requirements of capability development in particular sectors. These details would have to be worked out through detailed negotiations and the final policy instrument would have to satisfy the conditions of incentive compatibility and the enforcement capabilities of the state.

A viable strategy of developing competitive local firms using *ex post* incentives for foreign companies clearly has to be closely coordinated with strategies for attracting foreign technology. The joint policy package therefore requires attention to agency coordination and making sure that different policies, in particular those for attracting foreign technology and those supporting the development of domestic competitive sectors do not work at cross purposes or cancel each other out. Thus, the strategy for attracting FDI should target firms and sectors where components could potentially be supplied by domestic firms if their capabilities were appropriately enhanced. In the Indian auto case described in Box 4, it was lucky for India that the component industry was sufficiently developed in terms of its initial levels of capabilities. This made it feasible for Suzuki to accept the challenge of developing the components industry as a viable business proposition. **If an integrated policy package has to be designed, the initial conditions of different domestic component sectors need to be studied, and foreign investment sought in areas where, with appropriate capability development, domestic component producers are most likely to be able to enter.**

The next step is to coordinate the policy for attracting foreign investment with policies that create credible incentives with enforceable conditions for the foreign investor to directly invest and assist in the development of competitive domestic firms that can act as suppliers or purchasers of inputs. Clearly, the foreign technology provider is unlikely to make these investments in developing domestic capabilities without significant incentives, but the incentives have to be provided in such a way that the rents cannot be captured without the development of

the local capabilities. The examples of successful capability development referred to earlier provide some guidelines about what is involved, though the details of the policy would be different in Viet Nam and would have to be compliant with the specific trade and intellectual property right treaties Viet Nam has signed.

# IV. Viet Nam's Institutional and Political Context

A number of characteristics of Vietnamese political economy are particularly important for understanding the challenges for designing policies. Viet Nam has had many policies supporting the development of new sectors but it has not been very effective in enforcing the necessary conditions for ensuring that the policy support led to the emergence of new competitive sectors. Viet Nam has had a number of such policies, including preferential land allocation, tariffs, tax breaks and preferential access to credit. However, as in many developing countries, these types of support were provided *ex ante* to domestic companies in the expectation that they would eventually become competitive. However this type of *ex ante* support requires strong enforcement of conditions on the firms receiving the rents and the Vietnamese state clearly did not perform very well in this enforcement.

**The limited capacity of the Vietnamese state to impose conditions on local firms receiving support may appear to be paradoxical in a one-party state.** We may have expected such a state to have the power to impose conditions on firms receiving support. But several characteristics of the Vietnamese state have prevented this in reality. First, **many of the firms receiving support are state-owned enterprises (SOEs) that are linked to the party and state.** These firms could protect their rents and resist disciplining using their internal contacts and connections with the state and with the party. Secondly, **power is relatively broadly dispersed within the Vietnamese Communist Party, across different levels of the party hierarchy and across regions.** As a result, it has not been easy for the central authorities to impose conditions on rent recipients who may have contacts and connections with lower levels of the party and state, or with provincial party and state authorities. These features of the Vietnamese political economy can help to explain some of the limits of the rent management capabilities of different parts of the state. These features of Vietnamese political economy need to be kept

in mind in devising policy in the future. They can help to explain why Viet Nam's experience with policy instruments that provided large *ex ante* rents to firms, mainly SOEs, delivered relatively poor results in terms of developing new segments of competitive domestic industries. Thus, while Viet Nam's political settlement is clearly different from India or Bangladesh, Viet Nam has also found it difficult to discipline large firms receiving significant *ex ante* rents.

Despite the rapid growth of the private sector in recent years, SOEs remain important players in many sectors of the economy in terms of firm size and capitalization. SOEs still find it easier to access investment resources in many sectors and therefore use more capital-intensive technologies. Potentially SOEs have access to significant rents in the form of privileged access to credit and land and these could have been used to create opportunities for learning and capability development if continued access to these rents could have been made conditional on improvements in competitiveness. Unfortunately, SOE links with the party and state prevented this from happening. The continued ability of many inefficient SOEs to claim subsidies without improving competitiveness has been identified as a serious problem for sustaining growth in Viet Nam (Perkins & Vu-Thanh, 2011). However, not all SOEs are inefficient, and some SOEs have driven productivity growth with spillovers for the rest of the economy. In these cases, SOEs had internal rent management capabilities and leadership that enabled them to use their access to rents to engage in effective learning and capability development. In our case studies we find evidence of this in a few SOEs in the garments and textiles sector and Ngo outlines how an SOE drove innovation and productivity growth in the telecommunications sector (Ngo, 2013). Though SOEs are not a focus of this paper, clearly under some circumstances SOEs can use and manage their rents to achieve significant capability development.

We have seen that competition between provinces could have resulted in poor coordination of infrastructure investments in ports and industrial parks with excess capacity in some cases and the failure to achieve minimum efficient scale in others. A more serious consequence is that competition between provinces to attract investments, and particularly FDI, could result in a race to the bottom in terms of offers of rents to foreign investors without any enforceable conditions being attached to those rents. If each province tries to attract FDI by cutting tax requirements, offering cheaper land or promising specific infrastructure with fewer enforceable conditions, the result may be to enhance the bargaining power of foreign investors as they can go from province to province trying to get better deals. The effect of such a strategy may be that total FDI to Viet Nam may not much increase, but the conditions that the FDI investors are able to achieve may get progressively more attractive to them and reduce the policy space of the Vietnamese government to offer incentives that are conditional on the achievement of socially desirable outcomes. In particular, foreign investors may end up paying less and less tax and it may become even more difficult to persuade them to invest in building the competitiveness of local suppliers. Yet the access to tax revenues and the implementation of policies that develop a broad range of domestic component producing industries are important components of an inclusive growth strategy.

Finally, the rent management context in Viet Nam has been rapidly changing as a result of the integration of the Vietnamese economy into global trade and investment regimes through free-trade agreements like the WTO and bilateral free trade and investment agreements. These agreements have reduced the scope of tariffs and the possibility of negotiating domestic content requirements with foreign investors. Tariffs have been important instruments through which temporary support was provided to domestic industries, even though their efficacy in developing competitive sectors depended largely on the conditions that could be imposed on supported domestic industries. However, if the instrument itself is no longer readily available, conditions have to be attached to other forms of

support. Domestic content requirements were also used by countries as a condition attached to the support offered to foreign investors. Domestic content was an easy way to measure the transfer of technological and organizational capabilities to domestic firms. If domestic content cannot be directly invoked as a condition for policy support to foreign investors, other measures of local capability development have to be used. The disappearance of some of these policy instruments and conditions makes the design of policy more difficult but the importance of supporting capability development with appropriate policies remains.

Table 1 shows the significant changes in ownership structure in the industrial sector in Viet Nam over the last two decades. The share of foreign enterprises has grown from a negligible share in industrial output in the 1980s to almost half and its share in industrial investments has risen to almost a quarter by 2011-13. The significant weight of foreign enterprises underlines the importance of devising strategies in Viet Nam that can link FDI to domestic capability development. On the other hand, the share of SOEs in industrial output has fallen from more than half in the 1980s to 17 percent, but their share in investment remains close to 40 percent suggesting high levels of capital intensity and perhaps wasteful investments in this sector. Interestingly, the share of the Vietnamese non-state (private) sector has also declined since the 1980s, and this reflects the small scale and limited capabilities of the Vietnamese private sector. **The approach identified in this paper is to link the development of the Vietnamese non-state sector to FDI in new and creative ways to ensure inclusive growth is accelerated and sustained.** Productivity growth in both agriculture and manufacturing has also slowed down since 2001. Between 2001-05 and 2006-09, agricultural productivity growth declined from 4.5 percent per annum to 2.8 percent, and manufacturing productivity growth from 2.5 to 1.0 percent (Perkins & Vu-Thanh, 2011, p. Figure 7). It is in this context that the challenges of sustaining inclusive growth in Viet Nam have to be seen.

**Table 1 Changes in Ownership Structure of the Vietnamese Industrial Sector**

|   | 1986-90 | 1991-95 | 1996-2000 | 2001-05 | 2006-10 | 2011-13 |
|---|---------|---------|-----------|---------|---------|---------|
| <b>Share in Industrial Output (%)</b>     |         |         |           |         |         |         |
| <i>State Enterprises</i>                  | 55.4    | 55.0    | 43.3      | 28.9    | 19.5    | 16.9    |
| <i>Non-State Enterprises</i>              | 43.1    | 28.3    | 23.1      | 28.4    | 36.7    | 35.8    |
| <i>Foreign Enterprises</i>                | 1.4     | 16.7    | 33.6      | 42.8    | 43.8    | 47.3    |
| <b>Share in Industrial Investment (%)</b> |         |         |           |         |         |         |
| <i>State Enterprises</i>                  | 51.9    | 39.5    | 54.4      | 53.0    | 39.1    | 39.2    |
| <i>Non-State Enterprises</i>              | 42.5    | 36.3    | 23.6      | 30.9    | 36.3    | 38.1    |
| <i>Foreign Enterprises</i>                | 5.6     | 24.2    | 22.0      | 16.0    | 24.6    | 22.7    |

Source: (Vu-Thanh, 2014)

On the positive side, the new trade architecture has encouraged new types of FDI to come to Viet Nam, particularly in the assembly of higher technology electronics, which has become a new growth sector. Free-trade agreements attracted some of these investments as they made it easier for multinational investors in Viet Nam to import the components required for assembly operations. On the negative side, an immediate impact of the new framework has been to make it somewhat more complex for the state to develop policies to support the growth of domestic component supplying industries. The provincial competition for FDI may also have intensified, making it easier for multinationals to get more attractive support packages from national and local governments, with fewer conditions attached.

The market failures that constrain the development of competitiveness continue to operate, so support for new clusters and supporting industries still has to be provided, but in different ways. In addition to the requirement of designing enforceable conditions for ensuring the achievement of competitiveness, policies now have to be compliant with new trade and investment treaties. The paper draws on three sectoral case studies on the electronics, automotive, and garments and textiles sectors in Viet Nam to outline some of the core policy challenges for supporting inclusive growth.

# V. Case Studies

## 1. Garments and Textiles

The garments and textiles industry is the second biggest export industry in Viet Nam. It has enjoyed double digit growth rates in most years since the growth take-off in the late 1980s. Even after the global slowdown in 2008-09, growth recovered rapidly. The garments industry is not very capital intensive and entry for new entrepreneurs is relatively easy since capital requirements are not very great. However, Viet

Nam has faced problems in moving up the value chain and now faces more intense competition in the lower value segments of the market as lower wage countries like Bangladesh and Cambodia have entered these segments. The slow growth in the competitiveness of the textile sector has meant that the growth of the garments industry has been largely dependent on imported fabrics, and local content has varied between 20 and 29 percent between 2000 and 2012 (Table 3).

**Table 2 Viet Nam: Garments and Textiles Revenues (millions of US Dollars)**

| Year                   | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010   | 2011   | 2012   |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| <b>Total Revenue</b>   | 1,962 | 2,752 | 3,654 | 4,368 | 4,838 | 5,927 | 7,780 | 9,130 | 9,084 | 11,210 | 15,830 | 17,200 |
| <b>Growth Rate (%)</b> | 3.60  | 40    | 33    | 20    | 11    | 23    | 31    | 17    | -0.5  | 23     | 41     | 8.6    |

Source: (Ngo, 2013, p. Table 5.1).

**Table 3 Local Content Ratio in Garments and Textiles (millions of US Dollars)**

| Year                            | 2005        | 2006        | 2007        | 2008        | 2009        | 2010        | 2011        | 2012        |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Export Revenue</b>           | 4,838       | 5,927       | 7,780       | 9,130       | 9,084       | 11,210      | 15,830      | 15,090      |
| <b>Imports of Raw Materials</b> | 4,365       | 4,992       | 6,356       | 7,064       | 6,422       | 8,912       | 12,000      | 11,000      |
| <b>Import of Fabric</b>         | 2,399       | 2,980       | 3,980       | 4,454       | 4,226       | 5,378       | 6,750       | 7,045       |
| <b>Local Content Ratio</b>      | <b>0.10</b> | <b>0.16</b> | <b>0.18</b> | <b>0.23</b> | <b>0.29</b> | <b>0.20</b> | <b>0.24</b> | <b>0.27</b> |

Source: (Ngo, 2013, p. Table 5.5)

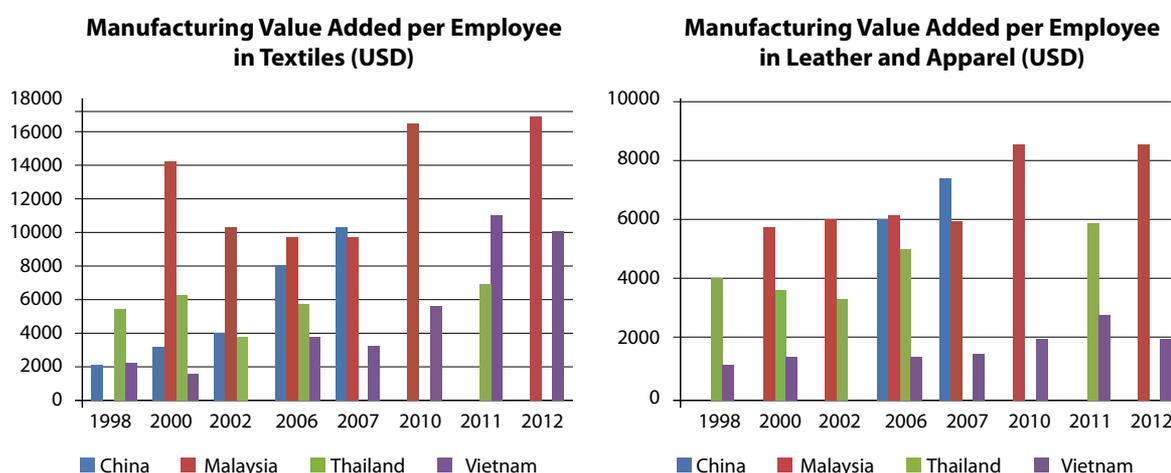
In 2013, there were 5,982 textile and apparel companies according to the Viet Nam Textile and Apparel Association. In terms of numbers the vast majority, around 84 percent, were private companies. However, the private companies are typically very small compared both to the massive state owned companies, many of which are in the process of equitization as well as the rapidly growing number of foreign-owned companies. Foreign owned companies constituted only 15 percent of the total number of firms, but accounted for 60 percent of the export turnover in 2012-13

(Viet Nam Textile and Apparel Association, 2013). The garments and textiles sector employs around 2.5 million people, which is roughly 10 percent of Viet Nam's industrial workforce (Hubbard, 2013). Every additional one billion dollars of exports creates an extra 150 to 200 thousand jobs, at an average income that is between fifty to one hundred percent greater than Viet Nam's per capita income (Viet Nam Textile and Apparel Association, 2013), a huge potential for creating productive employment opportunities. Figure 2 shows that historically value added per employee

in both the textiles and garments sectors in Viet Nam has been significantly lower than regional competitor countries (but note the figures for the garments sector include footwear) indicating the scope for making progress in upgrading technologies and organizational capabilities to

move into higher valued ranges of both textiles and garments. Figure 2 also shows that Viet Nam has been able to narrow the gap in terms of value added per employee in textiles in recent years compared to some comparator countries whereas in leather and apparel there is little progress.

**Figure 2 Manufacturing Value Added per Employee in Textile and Garments (USD)**



Source: UNIDO, 2015

The take-off in the garments sector began after the US granted Viet Nam Normal Trade Relations in 2001. Under the Multi-fibre Arrangement (MFA) Viet Nam had quota-free access until 2003. The MFA period provided the garments industry in Viet Nam with quota rents, as the allocation of quotas to Vietnamese companies gave the privileged companies rents. This period saw the rapid development of competitive capabilities in Viet Nam as the quota rents available under the MFA allowed learning-by-doing to develop the requisite organizational capabilities. However, the development of organizational capabilities could have been much faster and more broad-based if the allocation of the quotas could have been effectively linked to the achievement of competitiveness. In theory the Vietnamese government did have a system of quota allocation jointly managed by the Ministry of Industries and

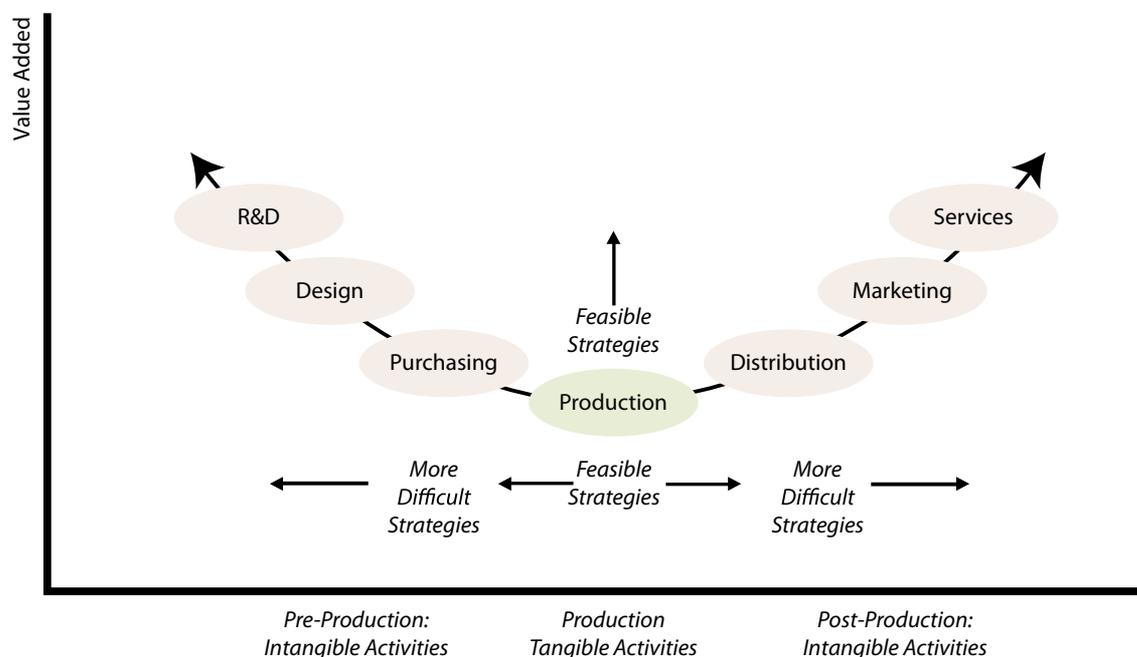
Ministry of Commerce based on criteria linked to competitiveness. However, Ngo shows that these conditions could not be effectively imposed and firms with connections could use rent seeking to get allocations of quotas independently of their relative performance in achieving competitiveness (Ngo, 2013, pp. 221-300). This is an early example of a policy design that failed to achieve optimal results because the conditions of allocating rents to firms were not fully enforceable.

The garments and textiles sector demonstrates the complexity of raising productivity in production systems that are integrated into global value chains. As Figure 3 shows, the actual production part of the garments and textiles chain is a relatively low value adding process, relative to the value added in pre-production and post-production activities. A developing

country seeking to raise the value added in its garments and textiles sector can attempt to do so either by moving into higher valued segments of the global value chain (horizontal movements to the left or right in Figure 3), or it can raise the productivity and value added in production (a vertical movement in Figure 3), or both. Movements in any of these directions involve the development of new or improved organizations and organizational capabilities, and therefore involve investments in learning-by-doing as well as investments in new technologies. In general, significant horizontal movements involve developing organizations with a global reach that can engage in global processes of

fashion design, research and development or marketing. The organizational structures and capital required to engage in these activities is usually beyond the reach of developing countries till they are much more advanced, and by then they are likely to move out of significant direct production activities in garments and textiles as a result of rising wages. For developing countries, the more likely mechanism for raising value added in garments and textiles is some movement towards purchasing and distribution, but more significantly, improvements in the productivity and value added in production activities through vertical movements of the production segment.

**Figure 3 The Global Value Chain in Garments and Textiles**



Source: Developed from Fernandez-Stark, Frederick, & Gereffi (2011)

The improvements in production processes (vertical moves in 3) that can lead to higher value added in production involve moving into the production of more sophisticated garments, the production of higher value fabrics, the use of better accessories, achieving higher quality of dyeing, finishing and packaging and so on. Each of these steps involves not only investments in new machines and more skilled workforces, but also investments in developing organizational capabilities through learning-by-doing so as to manage more complex production processes, more exacting quality control, managing more expensive stocks through better inventory management and so on. Instead of reinventing

the wheel, the typical strategies through which developing countries achieve these goals is by imitating the organizational strategies of more advanced countries and adapting them to local circumstances and conditions. This involves, at each stage, investments in learning-by-doing to develop the required organizational capabilities. This is where different types of rent management strategies become relevant.

The initial development of the garments and textile sector in Viet Nam was driven by SOEs. The SOEs had access to rents in a number of forms that allowed them to engage in production before they had fully achieved competitiveness, and this was critical for enabling the learning-

by-doing that eventually allowed many of them to achieve competitiveness. An important source of rents was the allocation of land to SOEs, which could be used as collateral for obtaining bank credit from state banks at lower interest rates than would be warranted by their market competitiveness. Secondly, in the later 1990s and early 2000s, the state also linked SOEs to foreign investors as the latter required local partners in joint ventures at that time. In theory this provided SOEs with privileged access to technology and organizational learning. Finally, the government also allocated funds to support training and skills development in the industry. This was partly to develop competitiveness in general, but partly also to spread growth to poor and mountainous regions of the country. One of the industry associations with significant SOE representation, VITAS (Viet Nam Textile and Apparel Association) and the large public sector holding company, VINATEX (Viet Nam National Textile and Garment Group) were given the responsibility to carry out the training to achieve these objectives.

While the significance of the other rents has gradually declined over time, the investment in skills through the SOE sector has remained important. In 2008 the Ministry of Industry and Trade and in 2010 the Ministry of Finance promulgated support policies for different types of training in the garments industry, including overseas training and joint training programmes with foreign enterprises, with foreign enterprises getting a minimum of 30 percent of their training costs as policy support. Vinatex was designated coordinator of these training programmes. In a limited survey carried out in 2014 on the efficacy of these support programmes, researchers found very limited impact of these policies according to garments industry insiders (Phi, Tran, & Trinh, 2014). The vocational training programmes were only accessible to plants belonging to Vinatex and private sector firms appeared not to know about the programme. Not only were the support programmes inadequately publicized, access was institutionally limited to a small number of plants which were not necessarily the ones facing the most severe skills shortages. Moreover, it was not clear how effectively the training outcomes were being monitored and what penalties there were for wasting resources. It would not be surprising if this policy design resulted in limited achievements in raising competitiveness or developing new employment or new firms.

These policies implicitly allocated rents to different stakeholders and in theory they could have

supported both the development of organizational capabilities and also the development of new skills. However, support for skills development can be wasteful without effective monitoring and enforcement of conditions attached to the funds received by training providers. In particular, skills development in remote areas should be complemented with support policies to enhance the organizational capabilities of local firms if sustainable employment is to be generated. Finally, we found that private sector firms often could not access these rents, and in addition, they reported difficulties in borrowing from banks to expand their businesses because they did not have the land allocations to use as collateral that SOEs have historically enjoyed.

More recent growth in the sector has been driven by foreign companies. Some of them are operating in higher value-added segments of the garments industry but so far spillovers of technical and organizational capabilities to local firms have been very slow. Rapid export growth in the garments sector is continuing as a result of foreign companies locating in Viet Nam, but the import of fabrics and accessories is also rapidly growing, so that the growth of net value added in the sector is relatively slow. Government policies have been particularly weak in terms of developing a competitive textile industry and other supporting accessory industries. As textile plants are large investments, this is an area where SOEs have played a significant role in the past. However, as a result of the rent management problems discussed earlier, their competitiveness remained low and the bulk of fabrics continue to be imported. There is a major investment in polyester fabrics (the Dinh Vu Polyester project) that is ongoing. This is a partnership between PVTex (a subsidiary of Vinatex) and PetroVietnam. This investment undoubtedly benefits from the support and the rents that are available to SOEs. The question is whether this fabric plant will achieve competitiveness, which depends on the internal compulsions on the managers, the external pressures on them, and the credibility and enforceability of any conditions attached to their continued access to rents. These conditions are not transparent but the poor competitiveness of previous investments in textiles suggests that without effective conditions being imposed, the likelihood of poor outcomes remains significant.

The WTO and other free trade agreements have also resulted in a gradual reduction and removal of explicit subsidies to the sector. Finally, preparations for TPP are ongoing, and this may

make policies for supporting organizational learning in the textile sector more complex in the future if and when the TPP is actually implemented. At the same time, TPP can make foreign investments in Viet Nam attractive and this could drive growth in higher end segments of the garments industry. The policy challenges in the sector include the following. The large number of smaller domestic private companies in the garments sector are effectively discriminated against because they cannot access land, credit and other resources on the same terms as the SOEs or the bigger foreign investors. However, inclusive growth in the form of broad-based employment generation and entrepreneurial opportunities is likely to be enhanced if domestic private firms in the sector can be supported to enhance their competitiveness and quality.

The development of productivity and value added in production in the local firms is most likely to be successful if partnerships between higher value adding foreign garments producers and local private companies can be achieved by policies creating incentives for these partnerships, but with effective and enforceable conditions for the transfer of know-how to local partners. These partnerships are most likely to be effective when a more advanced country is moving up the value chain shown in Figure 3, into say design and marketing and out of particular segments of production. With sufficient incentives such companies may be persuaded to transfer know-how about the production segments they are moving out of to developing country partners. The more advanced country companies may have an incentive to do this beyond the incentives offered by the Vietnamese government if the production of the future Vietnamese partners is to be designed or distributed by the foreign partner. This has been the typical strategy for countries enhancing their value added in production (Fernandez-Stark et al., 2011; Gereffi & Memedovic, 2003; Keane & Te Velde, 2008).

A second major challenge for the garments and textile sector is that the policy support for developing a domestic textile and accessory sector has not yet delivered significant successes. Here policy design in the past was not compatible with the state's rent management capabilities, and support for large domestic textile producing SOEs did not come with credible conditions that could compel rapid growth in competitiveness. The challenge here is to redesign policy so that it supports the requisite investments in capability development, but with effective conditions that

ensure high levels of effort by the recipients to achieve competitiveness rapidly. International experience as well as the experience of Viet Nam suggests that this too is more likely to happen through partnerships between foreign companies and domestic private sector companies.

## 2. Automobile Industry

Since 1992 the automobile industry was considered a priority sector and received one of the largest packages of incentives from the government. The sector grew at almost 17.5 percent per annum over the period 2000-2010, but despite this the sector remains largely an assembly operation with almost no development of domestically owned components industries. By 2013 there were 56 firms in the sector, of which 18 were foreign owned, but together the total production capacity was only around 460,000 vehicles per year, which could be the output of a single large globally competitive automobile plant. In addition there were around 210 firms engaged in making automobile components but these firms were typically very small and engaged in simple low-value component production like mirrors, glass, seats, batteries, parts of the chassis, tyres, radiators, wires and springs and steering wheels. Important components like engines, gearboxes and so on were entirely imported. The domestic content (or localization) was only around seven percent in 2014. In contrast, Thailand has over 1,500 components supplying firms and achieves a 70-80 percent localization rate. As the Vietnamese automobile sector includes many smaller and low technology plants, total employment was high, around 80,000 in 2013 (Pham, Dao, & Vu, 2014).

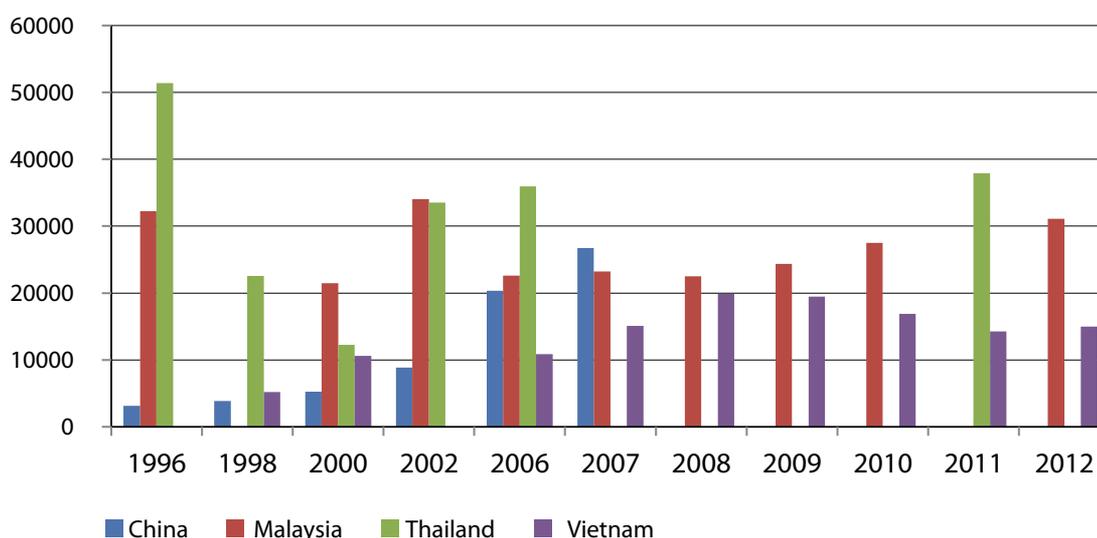
Policy support to the sector has included tariff protection, preferential excise taxes for local producers, domestic content requirements, privileged access to land and credit, and tax exemptions. Tariff rates have been very high for automobiles, ranging from 70-90 percent for cars of different engine capacities in 2014, but under WTO rules they are set to reduce to between 47-70 percent by 2019. Even more significantly, under the ASEAN Trade in Goods Agreement (ATIGA) and the ASEAN Free Trade Agreement (AFTA), tariffs within ASEAN are set to reduce to 0 percent by 2018. Although tariffs on imported cars have been high, the tariffs on components have been much lower, around 24 percent of value, which inadvertently created incentives for assembly operations rather than the development of local

component industries. We will return to these coordination failures later. In addition to tariffs, preferential excise taxes were used between 1995 and 2006 to give an incentive to domestic producers. Selected foreign firms also received tax exemptions and rent-free land for a number of years. For instance, Toyo Denso Viet Nam received three years of 100 percent tax exemption on their taxable income, and 50 percent tax exemption for another seven years (Pham et al., 2014).

Despite the significant levels of policy support to the sector, policy was relatively ineffective in developing a competitive Vietnamese automobile industry or competitive components suppliers on any significant scale. Figure 4 shows that by 2006 the productivity of the Vietnamese automobile

industry was significantly lower compared to its regional competitors in Thailand and Malaysia and China. The gap narrowed during 2008-2009 compared to Viet Nam and Malaysia but since then value added per employee in Viet Nam declined again increasing the gap with other countries. In 2012, Viet Nam automobile's value added was just half of Malaysia's. As Viet Nam failed to raise competitiveness, Japanese investments in the region were directed mainly to Thailand and then later to Indonesia, which have emerged as the preferred Japanese locations for automobile production in the region. This poses significant challenges for Viet Nam in determining a viable strategy for its automobile sector in the ASEAN region.

**Figure 4 Manufacturing Value Added per Employee in Automobiles (USD)**



Source: UNIDO, 2015

By 2013, Viet Nam had attracted a total FDI in the automobile sector of just over one billion US dollars, equal to the FDI in a single large automobile factory in Thailand or Indonesia. Despite very high levels of tariff protection, foreign investors benefiting from these policy rents clearly did not invest very much and failed to deliver on the domestic content outcomes they had agreed to achieve. The official plan was to achieve a localization rate of 40 percent by 2005 and 60 percent by 2010 for trucks, buses and cars. But by 2014 the localization was only around 7-10 percent for private cars (Ford 2 percent, Suzuki 3 percent, Toyota 7 percent) and 35-40 percent for light trucks and buses (Thaco around 33 percent, Vinaxuki around 50 percent). Toyota, for instance, committed to achieve a localization rate of 30

percent by 2006 but achieved only seven percent in 2014. No penalties were imposed on the recipients of support. Other possible targets, like export targets, were not even identified.

The failure to enforce conditions on *ex ante* rents is a significant problem in most developing countries because strong political and institutional enforcement capabilities are required to enforce these conditions. However, in Viet Nam, some of the biggest beneficiaries of the policy support were foreign firms and as these firms are typically not closely connected to bureaucratic or political power centres, it should have been easier to enforce some of these conditions. We can compare the Vietnamese experience with that of the Indian automobile sector upgrading described in Box 4.

One difference with the Indian case was that Viet Nam did not already have substantial capabilities in its tier one and two components sectors, and its domestic market was much smaller, so the level of rents provided to foreign investors through tariff protection of the domestic market may have been insufficient to induce the degree of investment in capability development that may have been required. If this was the case, the calibration of rents and domestic content targets would need to be different to be feasible and enforceable.

A further possibility is coordination failure across the relevant government agencies that could explain poor enforcement of conditions. The monitoring of progress in localization was the responsibility of the Ministry of Industry and Trade, the provision of financial incentives was the responsibility of the Ministry of Finance, while the withdrawal of business licenses was the responsibility of the Ministry of Planning and Investment (Pham et al., 2014). Effective monitoring and enforcement of conditions could only happen in this scenario if there was a clear understanding on the part of all these agencies (or in a higher agency that could coordinate them), that a high level of coordination was required. Without this coordination, the level of monitoring and enforcement was likely to be poor, with significant negative impacts on the outcomes of the policy support.

From the perspective of foreign investors, the lack of coordination on the part of policy-makers also constituted a big hurdle for making effective long-term investment decisions. The contradictory rates of tariffs on automobiles and components when the policy was to support domestic components industries has already been noted. Interviews suggested that the perception of automobile companies was that government policies were uncoordinated and unstable, and they could not make long-term decisions based on these policies. Tax rates for instance were subject to frequent changes, administrative procedures were complex, and there were also allegations of corruption, overlapping jurisdictions of agencies and so on. Generally, businesses in the sector argued that they did not find broad policy statements from government credible because the follow-up in detailed regulatory structures and policy instruments often did not happen in a timely and competent way.

These concerns about coordination and implementation continue to affect the new Vision 2035 Statement announced by the Prime Minister

on 16 July 2014 for the automobile industry (Pham et al., 2014). In principle, the revised strategy had many sound elements but doubts remained about how the contradictory aspects of the policy would be reconciled, the details spelled out, and implementation enforced. The new strategy recognized that there had to be a focus on particular technologies, and quite rightly, it focused on the medium technology segment of the automotive sector. For instance, it identified multi-purpose trucks suitable for agriculture and rural areas and small and medium-sized passenger cars appropriate for the local terrain and infrastructure conditions, which could be marketed at a reasonable price. For components, it also rightly identified the importance of focusing on a few specific products, such as actuators, gearbox components, engine components and so on, without attempting to produce the full range. The policy also took a more realistic position on localization than before, aiming for instance for a 30-40 percent localization in cars with up to nine seats by 2020. However, achieving competitiveness even in these limited segments will require coordination with major global companies so that Vietnamese production capabilities can improve and become part of their global supply chains. While the strategy statement identified some solutions and policies, for a programme of this level of ambition the solutions and policies were not sufficiently specific.

Industry insiders were not very confident about the capacities of the Vietnamese state to define the policy details given the broad policy objectives identified in the vision statement, and then to implement these detailed policies. Some representatives pointed out that the statement used vague terminology linking taxes to qualities like 'environmental friendliness' or 'fuel economy'. The detailed definition of these categories and the associated rates of tax and other incentives would determine whether the policy would achieve anything. Other representatives pointed out that the specific policies supporting component industries had not been identified and the viability of the policy would depend on whether the support was sufficient to attract new investments. The Viet Nam Automobile Manufacturers Association, VAMA, pointed out that not enough had been done to reduce the inconsistency of policies coming from the Ministry of Finance and the Ministry of Trade and Industry. Ford Viet Nam was concerned that a specific plan of action identifying long-term policies for improving competitiveness was missing. Finally,

the crucial question of the effective enforcement of conditions had not been addressed so the monitoring of companies receiving support was likely to remain as poor as before (Pham et al., 2014).

We have seen that the probability of policy success depends on the policy providing the right level and type of support for solving particular market failures, together with enforceable conditions to ensure public resources are not wasted. The scale of ambition in the new vision statement requires significant capabilities to define the types of instruments that could address particular market failures constraining the achievement of different objectives, and then selecting the instruments whose conditions of monitoring and enforcement were most likely to be effective given the enforcement capacities of the state. As the statement did not lay all this out, the likelihood is that the push and pull of different interests would result in a piecemeal rolling out of policies that will end up being both contradictory in its different parts as well as providing policy support without enforceable conditions. Given the weak enforcement capabilities of the relevant agencies in the past, it may make more sense for Vietnamese policy-makers to focus on a much less ambitious set of objectives to begin with.

The weak enforcement capabilities of the state are particularly obvious in the motorcycle sector, which is paradoxically a sector that has done particularly well in Viet Nam. The share of the motorcycle industry in national industrial production grew from three percent in 2005 to 24 percent in 2007. Even though the marketed brands are foreign owned, the domestic content in the components industries have steadily grown even though there is still a significant gap in the quality of domestic components producers and the globally competitive producers of these components. Nevertheless, even this qualified success was the product of an accidental set of circumstances that created the right pressures on rent recipients at a critical time (Ngo 2013).

Like the automobile industry, the motorcycle industry enjoyed policy rents generated by tariffs and other policy instruments. From the mid-1990s onwards Japan's Suzuki, Yamaha and Honda and Taiwan's VMEP began to locate assembly operations in Viet Nam using imported components. Initially there was very little transfer of technical and organizational capabilities to local component producers. The transition happened through an unplanned shock, the

so-called 'China shock' over 2001-2004 when lower quality and cheaper Chinese motorcycles flooded the Vietnamese market (Fujita, 2007). The Chinese motorcycles had two effects. First, these technologies were easier for Vietnamese component producers to imitate. Secondly, the Japanese companies suddenly discovered that the only way to compete with the Chinese imports was to reduce their costs by working with Vietnamese components producers to produce cheaper components than those imported from Japan. The presence of local market rents made it viable for the Japanese firms to invest in the capability development of their Vietnamese partners (instead of simply leaving). The localization did not come about because the Vietnamese state successfully ensured that access to local market rents depended on Japanese companies meeting enforceable localization conditions, but rather because Chinese competition forced them to do so, given the attractiveness of the rents in the domestic market created by tariff protection. This period led to the transfer of substantial organizational capabilities to Vietnamese components producers (Fujita, 2007; Ngo, 2013).

From 2004 onwards, new brands of Japanese motorcycles had emerged that were cheap enough to ward off Chinese competition, and Vietnamese component producers entered at the lower levels of the components production chain. The motorcycle experience shows the role policy rents can play in making investments in capability development viable but it also shows that this does not necessarily happen without pressure on the rent recipients to make these investments and to enforce high levels of effort in the learning process. In the motorcycle case the pressure emerged through market competition with the Chinese at the right time. But if a policy framework has to be devised to support capability development in the automobile industry, the policy instruments providing support for investments in capability development have to be appropriately designed as another lucky external shock may not happen again.

Given the policy formulation and implementation capabilities of a developing country state, a successful Vietnamese automotive strategy for the next decade or so has to make choices about where to focus policy attention. Too much ambition can result in too little being achieved. As the components that go into cars are largely produced by Tier 1 and 2 component industries, an integrated strategy for the automotive sector has to jointly consider the strategy for promoting

foreign original equipment manufacturers (OEMs) and their component producers, both local and multinational. The failure to develop a competitive domestic components industry has meant that the continuation of even limited tariff protection for imported components has resulted in high costs for assemblers by increasing the effective price of imported components. Not surprisingly, OEMs have put pressure on the government to further reduce tariffs and taxes on imported components so that the requisite components can be cheaply imported. This would help the assembly industry, but at the cost of making the Vietnamese automotive industry even more of an assembly industry. This may be progress given the current state of the industry, but does not lead to the development of a domestic components industry. The problem is that the development of a globally competitive components industry is the most likely way of generating a significant number of new jobs in the automotive sector, and therefore supporting the components industries should be an important part of an inclusive growth strategy (see Box 4).

The first policy challenge is therefore to identify the contours of the broad policy that the country should follow in the automotive sector. Should Viet Nam focus on assembly of export-quality cars by foreign OEMs based on largely imported components, or should it try to build a domestic components industry? The former strategy involves reducing tariffs across the board. In contrast, the latter strategy involves providing incentives to attract assemblers who produce automobiles that use the greatest range of components that could potentially be manufactured by domestic components producers. The strategy of attracting these types of automobile OEMs would have to be combined with specific strategies of developing the capabilities of complementary domestic components manufacturers so that the latter can benefit from the access to export markets by means of supplying components to the foreign assembler. A lack of clarity on these broad policy choices can hamper the development of coherent support policies that business can understand and respond to in systematic ways.

Given that a large number of countries are potentially competing to attract multinational companies in automobile assembly operations, including in the ASEAN region, a strategy that focuses on assembly is vulnerable to even lower wage countries tempting multinational assemblers away in the near future. The more sustainable strategy for a rising middle income

country may be to develop domestic components production capabilities. This is desirable both from the perspective of broad-based growth because it creates opportunities for entry by new entrepreneurs and because it also makes the country more attractive for assemblers in the future if the components industries become globally competitive. The opportunity of sourcing components from local producers who are able to produce at global standards can lower sourcing costs and make particular countries attractive for locating assembly operations.

For a relatively small country like Viet Nam, trying to simultaneously develop all of the components industries required for producing a complete car may not be feasible either in terms of scale economies, the quantum of support required or the time frame over which support would be required. It may be more feasible to identify and focus on a few critical automobile components in which Viet Nam could aim to become globally competitive through appropriate support policies and partnerships with foreign technology providers. However, there are implications for adopting such a strategy, because the payoffs would be over the longer term. Such a strategy may require incentives for particular types of assemblers and may also dissuade some assemblers from coming to Viet Nam in the immediate future because they may be worried that domestic support policies may affect the availability of competitive components for their assembly operations.

Over the longer run, however, the emergence of a competitive components industry would enable a greater degree of imitation and clustering by emerging domestic entrepreneurs and thereby contribute to inclusive growth. This is likely to happen since the capital and technology requirements for entering an appropriately chosen segment of components production is much less demanding than attempting to produce an entire automobile. If such a strategy were to be adopted, considerable thought would have to be given to the selection of the appropriate segments of components that Viet Nam should attempt to competitively produce. Foreign technology providers could then be given specific *ex post* incentives to set up competitive production in these components sectors, with appropriate monitoring and implementation capabilities being developed on the side of government to ensure effective policy implementation to achieve these goals. Once Viet Nam becomes competitive in one or two automobile components with

significant domestic content, other components may follow, with the development of clusters of component industries that may eventually make it possible to achieve a high level of domestic content in automobile assembly in Viet Nam.

Clearly, different policies are called for depending on whether Viet Nam chooses a non-targeted assembly route or the components production route, which requires targeted support strategies. Developing a limited number of components industries may not be supported by the most advanced-technology automobile assemblers who are likely to prefer an immediate opening up of all components imports so that globally competitive automobiles can be immediately assembled in Viet Nam. However, a strategy of attracting these types of assemblers by adopting low tariff and tax policies without any other types of support for domestic components producers will undoubtedly slow down the development of the domestic components industries. These trade-offs need to be explicitly discussed by policy-makers so that consistent economic policies can be adopted.

### 3. Electronics Industry

The electronics industry has been a dramatic success story in Viet Nam over the last few years with exponential growth after 2010 driven by very significant FDI inflows. Between 2007 and 2011, employment in the sector doubled, with the employment across the sector reaching around half a million. The background to this was a significant shift in policy instruments that totally changed the allocation of rents from SOEs to FDI projects. Three phases in policy can be identified.

In the first phase, from the opening up of the economy around 1990 to the early 2000s, significant rents were made available to the electronics industry in the form of low corporate taxes and high tariffs on imports of completed sets. These rents could only be accessed by forming joint ventures with SOEs as only SOEs had general trading rights and access to land. As a result, foreign investors had strong incentives to form joint ventures with SOEs as a way of accessing these rents. However, access to these rents for foreign investors did not come with effective conditions that ensured the transfer of organizational capabilities to their Vietnamese partners. Although much technical knowledge was transferred through these joint ventures, competitive Vietnamese firms did not emerge

over this period (Nguyen et al., 2014).

It is not surprising why competitive SOEs did not emerge out of these joint ventures. The SOEs were organizations led by bureaucrats who did not necessarily see this opportunity as one of transforming their plants into competitive entities. There would have to be considerable pressure on such organizations to carry out the internal organizational changes and experimentation to achieve competitiveness. Nor did the foreign partners have any compelling reasons to exert time and effort in working with their SOE partners to enhance their competitiveness. The policy design did not link any of these rents to productivity outcomes. Rents were effectively an inducement to the foreign company to form a joint venture with the SOE rather than a policy-created opportunity for creating competitive Vietnamese companies.

The second phase from around 2000 to 2010 was characterized by trade and FDI liberalization that allowed foreign companies to directly access some of the rents without having to go through a Vietnamese SOE partner. In 1998 the restrictions on trading rights were lifted as part of the US-Viet Nam Bilateral Trade Agreement. Full foreign ownership was allowed in export-oriented firms in 2000. Trade liberalization also happened over this period as tariffs were reduced as a result of WTO commitments and the ASEAN Free Trade Agreement. The result of these changes was that foreign firms did not need an SOE partner to access rents, particularly those based on land allocation, and many of the joint ventures unravelled. Foreign investment strategy shifted to importing components for local assembly. Unfortunately, in many cases, the previous Vietnamese SOE partners discovered they did not have sufficient competitiveness to survive on their own. Growth in the sector was high over this period as a result of accelerated FDI investments in assembly operations, and export growth during 2002-2009 was around 30 percent annually. The downside was that Vietnamese capability development in the sector slowed down further and was even reversed in some areas (Nguyen et al., 2014).

The third phase, from around 2010 was characterized by an almost complete reversal of fortunes in terms of access to rents. Now foreign firms achieved privileged access to rents and domestic firms were left scraping the barrel, particularly in the private sector. An important policy reinforcing this reversal was a 2006

decision to delegate the task of evaluating and licensing FDI projects from the central to the provincial governments. Provincial competition now led to a variety of incentives being offered to FDI projects, ranging from investment premiums and accelerated depreciation to tax holidays and reductions of land use fees. Out of 48 provinces surveyed by the Ministry of Finance, 32 granted extra incentives to investment projects. Most of the incentives were related to land or taxation. With respect to land, incentives included extended exemptions of land rent, subsidies for infrastructure, provision of land clearing and surfacing services at public expense, and preferential policy rents corresponding to the size of the project. In a 2011 survey conducted by UNIDO and the Vietnamese Ministry of Planning and Investment, it was found that most foreign investments in Viet Nam received tax breaks and land rent reductions while local firms did not. These policy rents for FDI investors did not come with any conditions for adding to local value added. However, the attractiveness of these rents and the locational decisions of many multinationals to relocate out of China led to an explosive period of growth for Viet Nam. The growth rate of electronics exports shot up to 96 percent in 2011 and in 2013 electronics became the biggest export sector, leaving garments and textiles in second place (Nguyen et al., 2014).

The firm structure in the electronics sector completely changed over this period. SOEs virtually disappeared in terms of significance and the sector became dominated by leading multinational companies like Intel, Samsung, Nokia and LG but with many small domestic private sector companies. The domestic electronics companies account for less than twenty percent of local market sales and five percent of exports. Domestic value added by the multinational companies is also limited because it is largely the value added by labour used in assembly activities, which may be as low as one to two percent of the sales value of the sector. Nevertheless, a total of around 500,000 people are employed in this sector, so there is considerable value added in aggregate

(Nguyen et al., 2014). In terms of enhancing domestic value added and achieving inclusive growth, the sector faces similar policy challenges as the much less dynamic automobile sector. The huge growth in electronics exports is based largely on imported components being assembled by Vietnamese labour. Most domestic Vietnamese companies are too far away from competitive capabilities to be significant suppliers in the production chain of the very advanced original equipment manufacturer (OEM) products that dominate the product mix in the sector. So the policy question is how to enhance the role of domestic component suppliers?

A historic comparison of productivity with regional competitors in Figure 5 suggests that Viet Nam has been largely engaged in the lower value-added assembly stages of the electronics industry. Also the gaps in value added per employee compared to other regional competitors remain significant as Figure 5 suggests. Should Viet Nam focus on its apparent comparative advantage as an assembly country, reducing taxes and providing incentives to more OEM brands like Samsung to come to Viet Nam? Or should it plan for the longer term to develop its own components clusters, which would not be competitive to begin with and would require sustained periods of support and capability development? At the moment, it is clear that Viet Nam is relying on the first strategy. The consequence is that the gap between the quality of components demanded by the OEMs and the capabilities of domestic Vietnamese component producers is rapidly increasing. While some of the more sophisticated domestic components producers, particularly those with a history of linkages with the OEM brands may hope to benefit, most Vietnamese components producers are unlikely to do so. This means that the presence of the multinational OEMs may not translate into inclusive growth without supportive government policies for the components industries.

**Figure 5 Manufacturing Value Added per Employee in Electronics (USD)**



Source: UNIDO, 2015

Here too, the choices facing the electronics sector are similar to those facing the automotive industry. It is unlikely that Viet Nam will be able to develop the full range of component industries that are required to produce, say, a mobile phone of the quality produced by Samsung. The policy task would be to attract the assembly of electronics products where the technology and sophistication of the components required are close enough to the capabilities of existing Vietnamese producers for a viable technical and organizational upgrading strategy to be feasible. The second stage would be to develop policy instruments for supporting these components producers in ways that were effective. The policy may require being selective about the types of foreign technology investors who should be offered the significant rents to relocate to Viet Nam. Priority should be given to attract those OEMs whose supply chain has significant

segments where a country with Viet Nam's level of capabilities in electronics could enter. The policies for attracting these multinational investors would have to be complemented with additional policies supporting capability development in selected components industries. The two sets of policies would have to be simultaneously implemented with an enforcement of necessary conditions. Conversely, the alternative of supporting every multinational investor who expressed an interest in Viet Nam with significant policy rents may not be the best use of public resources, and may result in very slow progress in terms of inclusive growth.

# VI. Policy Options for Improved Inclusive Growth Strategies

The challenge for inclusive growth strategies is to design policies that can effectively overcome the relevant market failures constraining growth. Effective policies also have to ensure that support is not wasted by identifying necessary conditions that can be monitored and enforced in the political and institutional context of the country. Our discussion of the underlying issues and the examples of previous policy experiences in three sectors help to identify a number of broad themes to inform policy design:

First, it is clear that the **challenges of addressing broadly defined goals can be quite complex, both in terms of understanding the relevant economic constraints, and also in terms of designing policy so that the necessary enforcement conditions are met.** Developing countries like contemporary Viet Nam have limited policy space and limited capabilities of enforcement and coordination. Policies targeting particular sectors should be simple and should target a small number of issues at any one time. More ambitious policies are less likely to deliver results because contradictions are likely to emerge between different instruments, and enforcement is likely to suffer as a result of coordination failures.

A second feature that has characterized the experiences in all of our sectors is that the **Vietnamese state has found it difficult to monitor and enforce conditions on large ex ante rents allocated to a wide range of companies.**

Finally, **coordination across agencies and between centre and provinces has been a problem for designing the right allocations of rents with the right conditions to achieve the desired objectives.**

**These observations suggest that it may be necessary for Vietnamese policy-makers to consider more narrowly defined but coordinated policies of promoting inclusive growth in particular sectors.**

What might such policies entail? The details would depend on an assessment of the magnitude of the competitiveness gap in different medium-technology component industries to identify segments of the components industries that would be feasible for Viet Nam to try to enter with a strategy of capability development. At a general level, we know that Vietnamese manufacturing sectors suffer from low levels of competitiveness (Central Institute for Economic Management, General Statistics Office, & Development Economics Research Group University of Copenhagen, 2014; Coxhead, Phan, Dinh, & Ninh, 2010; Nixon & Walters, 2010). Policy formulation requires more specific studies of particular components industries to identify gaps in the cost of production of products of specific qualities, relative to competitors.

Capability development strategies will be more challenging the greater the initial competitiveness gap. It makes sense to begin with less ambitious strategies, which means identifying segments of components production where the competitiveness gap is initially not too great. It is most likely that developing countries like Viet Nam will find it easier to achieve competitiveness in relatively low technology segments of components production, in line with the experiences of China and other rapidly industrializing countries (see Box 1). This observation is likely to be contrary to the expectations of many policy-makers who may think that the best strategy is to emulate and adopt the most advanced segments of components production. The problem is that such attempts are likely to take long periods of policy support to a small number of firms, and the monitoring and enforcement capabilities may fail to ensure that these rent allocations will pay off. Moreover, moving up the productivity ladder is more likely to be successful for firms that have already achieved productivity in lower technology segments of production. This type of organic growth of firms is more sustainable as a long-term strategy for countries like Viet Nam,

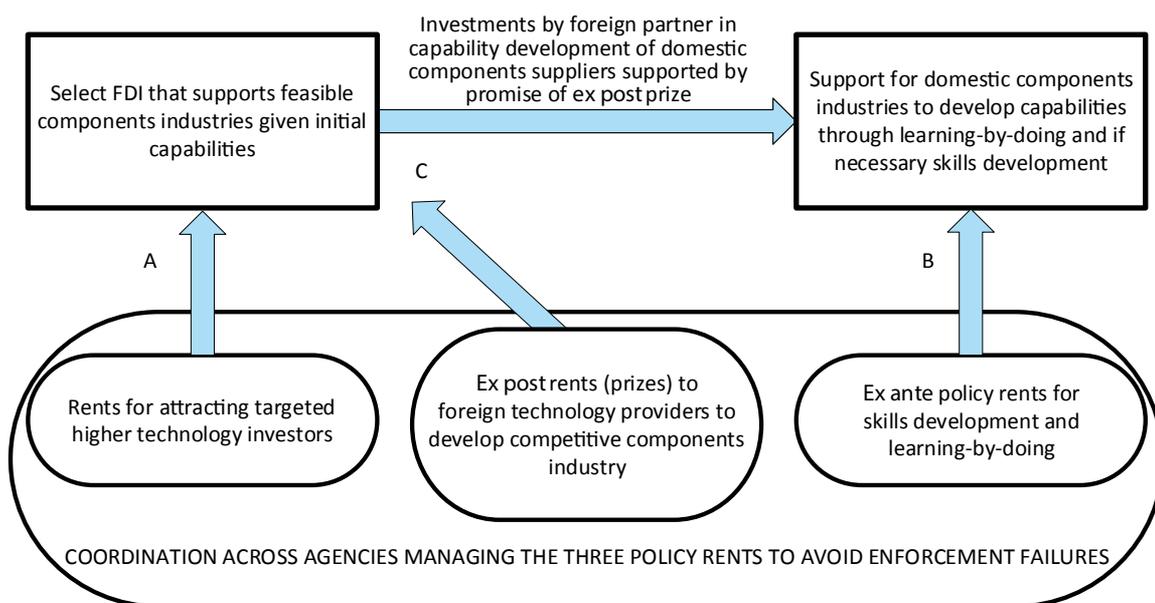
and is also more compatible with an inclusive growth strategy.

Viet Nam has been very successful in attracting FDI and it makes sense to leverage this success in developing medium technology industries that can be linked to global value chains through the foreign companies already operating in Viet Nam. This requires policy clarity about the segments and technologies to prioritize, and it also requires limiting the number of sectors and technologies that policy is attempting to promote. Otherwise, as we have seen, policy contradictions can emerge as a result of attempting to achieve multiple objectives with a limited number of instruments.

Figure 6 summarizes some of the observations made in previous sections about the necessity

of coordinating policies for attracting higher technology investments with strategies for developing medium-technology component industries. The two objectives require different sets of rents allocated with different conditions, and these policies need to be coordinated. Arrow A shows that attracting the appropriate FDI can be assisted by offering targeted incentives for attracting types of higher technology assembly operations that are most likely to create opportunities for domestic components production. This would require a strategy of offering incentives but only to particular foreign technology providers, selected on the basis of the appropriateness of their products for developing feasible domestic components producing supply chains.

**Figure 6 Interlinked Policy Rents for Technology Acquisition and Capability Development**



At the same time policy has to support the development of competitive domestic capabilities in selected segments of medium-

technology production. This in turn can involve two different types of policy rents. Arrow B shows the more usual policy of providing *ex ante* rents

to emerging firms, both as part of a capability development strategy and for financing skills development. However, each has different conditions that need to be enforced and if these conditions are unlikely to be enforced, there is no point in such an *ex ante* support strategy. An alternative and possibly complementary support strategy is shown by the two arrows marked C. Here policy support is provided to the foreign investor in the form of an *ex post* prize that is only accessible if the investor succeeds in developing the capabilities of domestic components suppliers. The *ex post* prize could take the form of performance related fees that could be offered to the foreign partner for achieving specific goals such as raising the competitiveness of domestic components suppliers to the point where they are able to integrate into the supply chain of the OEMs.

The objective of such contracts would be to induce the investor to invest in developing the capabilities of the relevant suppliers and the investment is rewarded with appropriately large *ex post* prizes if and when success is achieved. The details of the contract would have to be carefully negotiated, and in some cases significant up-front cost sharing may be necessary to induce the foreign partner to participate in the scheme. This may be necessary, for instance, in cases where the initial capabilities of domestic components producers were relatively low. The advantage of *ex post* rent contracts is that the monitoring of the learning effort associated with the rent is much less because the investors have a strong incentive in ensuring that the desired outcomes are achieved to access the promised *ex post* rents. We have seen that variants of such *ex post* rent strategies have been successful in developing competitive component industries in a number of countries (Box 4). Nevertheless, here too some conditions have to be set and enforced by the state to ensure that capability development in new areas is achieved.

The policy package for supporting inclusive growth in a sector can therefore include more than one type of rent, but the different rents shown in Figure 6 have to be coordinated if they are not to operate at cross purposes. The policy design and the types of rents involved would depend on the specific technologies, types of investors and the initial capabilities of stakeholders in that sector. Policy analysis at the inception stage can help to reduce the chances of failures, but policy analysis cannot remove the possibility of failure entirely. This is why policy-makers also have to be

ready to experiment with small-scale trials. Small-scale trials of particular mechanisms of support, beginning with a small number of firms in a sector, is vital to test whether the initial competitiveness gap and learning capabilities of domestic firms were correctly assessed and the appropriate success criteria identified. Policy design also has to test if the specification of rewards and penalties are appropriate given the monitoring and enforcement capacities of the state. Success can be scaled up, but it may also be necessary to modify or even reverse some policies as evidence on outcomes comes in. The evidence of successful technology policies in East Asia and China (Box 3) shows the importance of experimentation and trials, and the appropriate scaling of the initial policy so that it could be modified in the light of experience.

The different components of a successful rent management policy can now be summarized. First, policy has to identify the market failures constraining the competitiveness of Vietnamese producers in potential medium-technology sectors as well as the market failures that may constrain investments by foreign technology providers who require these suppliers. As Figure 1 summarized earlier, this involves identifying the critical contracting failures constraining growth in these related sectors and then designing policies so the required conditions for policy success are enforceable. As policies create and allocate rents, and require conditions imposed on rent recipients to achieve desired outcomes, a successful policy-making process is effectively an exercise in feasible rent management. Figure 6 shows that a successful inclusive growth strategy based on combining FDI investments with domestic capability development is likely to have to coordinate different types of rents allocated or offered to different firms with specific enforceable conditions. Thus, policy may have to provide incentives to foreign technology providers of particular types to locate in the country, and it may also have to assist strategies for developing the capabilities of medium-technology domestic components producers linked to those investments.

Figure 6 can be used to structure the policy discussion in particular sectors by allowing us to highlight the different types of policies that may be required and the feasibility of designing policies in particular ways. For example, in the case of garments and textiles, the strategy would be to attract foreign firms that were moving up the value chain into design, marketing and research, and

were shifting out of their own high-productivity production activities. Policy would have to consider incentives for such partners to transfer their production activities to local partners, but significantly, provide them with incentives for transferring organizational and technical know-how to local production firms. The rent policy, following Arrow C in Figure 6, may be to provide a substantial reward, appropriately calibrated, to the foreign technology provider to assist one or more domestic companies to set up production lines, inventory management systems, quality control arrangements and marketing networks to ensure the achievement of competitiveness. The foreign investor could be offered a limited return during the experiment but a substantial *ex post* performance fee or prize if the Vietnamese company started exporting or integrated into the higher value segments of the supply chain of the foreign partner company. The rent management capability required of the state would be to define and assess success appropriately and release the reward only when performance criteria were met. This type of approach would have to be fine-tuned in its details, but the point is that the monitoring and enforcement requirements for the rents would be much lower in this case, while still creating incentives for the development of organizational capabilities. The emergence of the Indian automobile industry or the Bangladeshi garments industry are applied examples of such strategies.

In the Vietnamese automobile or electronics cases, much more attention would have to be given to the overall strategy as discussed in earlier sections. For instance, coordination failures can be reduced significantly if strategic coherence was achieved over whether to focus on immediately assembling the most advanced cars or on attracting only those types of car assemblers which allowed the development of particular domestic components industries. In each case, the types of foreign technology investments that need to be attracted would be different. Our hypothesis is that a components-based approach is likely to deliver better long-term results for inclusive growth. If the goal was to sequentially build up capabilities in components industries, the appropriate technologies to attract would be assemblers whose components subcontracting requirements were at the right level of technological sophistication for parts to be feasibly subcontracted to local medium-technology producers. A components industry development strategy would therefore be likely

to involve specific strategies of using type A, B and C rents in Figure 6, and coordination and policy coherence would be much more important. In contrast, a strategy of attracting a wide variety of automobile assemblers would be quite different because under this strategy all assemblers would want low-tax imported components and may oppose any targeted strategies promoting capability development in particular domestic companies.

A similar set of questions arises in the electronics industry. A components-based approach would have to use type A rents much more carefully to attract particular components manufacturers or assemblers who were just advanced enough in the technical sophistication of their production to be able to engage in subcontracting to local producers in the presence of incentives of types B and C in Figure 6.

The discussion in this paper shows that theory and international evidence suggests that policies can be designed better to support inclusive growth strategies in developing countries but they require greater attention to coherence and policy design. Effective policies have to identify and address the important contracting failures constraining growth, and they also have to link policy support to enforceable conditions to ensure that the policy support is more likely to be successful.

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