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GETTING TO WORK

Research Topic
Labour Market, Employment, and Urbanization in Viet Nam to 2020:
Learning from International Experiences



HANOI, VIETNAM
MARCH 2010

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GETTING TO WORK

**RESEARCH TOPIC
LABOUR MARKET, EMPLOYMENT,
AND URBANIZATION IN VIET NAM TO 2020:
LEARNING FROM INTERNATIONAL EXPERIENCES**

Ian Coxhead • Diep Phan • Dinh Vu Trang Ngan • Kim N. B. Ninh



The Asia Foundation

**HANOI, VIETNAM
MARCH, 2010**

FOREWORD

The Socio-Economic Development Strategy (SEDS) serves as the top-most national development document of Viet Nam. It provides a system of policies for national socio-economic development at the overall, wholistic, fundamental and long-term level. SEDS reflects a system of fundamental development approaches and objectives, strategic breakthroughs, major modalities for and solutions to socio-economic development in a 10-year period of the country. It serves as the foundation for formulating sectoral strategies; socio-economic development master plans for regions and territorial areas; sectoral development master plans; and five-year and annual socio-economic development plans. The goals and directions stated in SEDS are translated into concrete programmes and action plans in individual planning periods to achieve such goals.

The 10-year Socio-Economic Development Strategy (SEDS) 2001-2010 was prepared on relatively solid scientific research foundations and through an open and participatory process. The United Nations Development Programme (UNDP), under Project VIE/99/002, supported the introduction of international experience and best practices into the SEDS 2001-2010 preparation process, and supported open and participatory policy consultations and discussions. Responding to the Government of Viet Nam's request, UNDP has been continuing to support the sound evidence-and best international experience-and knowledge-based; and open and participatory policy formulation of the SEDS 2011-2020 through the Project 00050577 entitled "Support for Formulation of Socio-Economic Development Strategy 2011-2020". The SEDS 2011-2020 is being developed and consulted for finalisation and will be submitted to the XIth Nationwide Party Congress for approval in early 2011.

Within the framework of the UNDP supported project 00050577 "Support for Formulation of Socio-Economic Development Strategy 2011-2020", a series of research have been conducted. Topics and results of the research have been consulted among SEDS Drafting team, policy makers, academia and international community. Research results have partly contributed to supporting the definition of evidence-based prioritized goals and break-through policy options and measures of SEDS 2011-2020 development process. This report was commissioned by the Development Strategy Institute (DSI) of the Ministry of Planning and Investment and UNDP. The report contains views of the consultant team and does not necessarily reflect the official views or positions of DSI or UNDP.

We are very pleased to publicly introduce the research paper to a wide range of audience for reference to the discussion and consultation process of SEDS 2011-2020 formulation.



Setsuko Yamazaki
Country Director
UNDP Vietnam



Dr. Cao Viet Sinh
Vice Minister
Ministry of Planning and Investment

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The research was carried out by The Asia Foundation. The research team consisted of Professor Ian Coxhead, Department of Agricultural and Applied Economics, University of Wisconsin-Madison, USA; Assistant Professor Diep Phan, Department of Economics and Management, Beloit College, USA; Ms. Dinh Vu Trang Ngan, Fulbright Economics Teaching Program, Ho Chi Minh City; and Dr. Kim N. B. Ninh, Country Representative of The Asia Foundation in Vietnam. Simulation modeling was conducted in collaboration with Assoc. Prof. Dr. Nguyen Van Chan of the National Economics University, Hanoi.

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ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank
AGE	Applied General Equilibrium
APO	Asian Productivity Organization
CIEM	Central Institute for Economic Management
CPI	Consumer Price Index
DSI	Development Strategies Institute
FDI	Foreign Direct Investment
GDP	Gross Domestic Products
GSO	General Statistics Office
HCMC	Ho Chi Minh City
HDI	Human Development Index
MOLISA	Ministry of Labour, Industry, and Social Affairs
NIE	Newly Industrialized Economies
SE	Southeast
SEA	Southeast Asia or Southeast Asian
SEDS	Socio-economic Development Strategies
SME	Small Medium Enterprise
SOE	State-owned Enterprise
TAF	The Asia Foundation
TFP	Total Factor Productivity
TVE	Township and Village Enterprises
UN	United Nation
UNDP	United Nation Development Program
VLSS	Vietnam Living Standard Survey
VHLSS	Vietnam Household Living Standard Survey
WTO	World Trade Organisation

EXECUTIVE SUMMARY

In 2011-20 Vietnam will enter the third decade of growth based on its reintegration with the global economy. The Vietnam that in the 1990s was counted among the very poorest countries in the world is now poised to become a middle-income economy, having leapfrogged many others in the process. Two decades of strong growth, at a pace matched by very few countries even in the dynamic East and Southeast Asian region, have brought about a sharp decline in the prevalence of severe poverty, from two-thirds of the population to well under one fifth. Life expectancy has increased, and infant mortality and other fundamental indicators of health and wellbeing have all improved enormously. The economy has been transformed by growth from overwhelmingly rural, agrarian and low-tech to a vibrant mixed marketplace with bustling cities, highly diverse industries and advanced information and communications networks. A decade ago international trade scarcely mattered to production or resource allocation, let alone daily life; now the global economy is ubiquitous and its influence is pervasive.

For all this change, however, the wealth of today's Vietnam is still based on two fundamental endowments: labour and land. Economic surpluses generated by the use of these factors have produced savings and investment that increase domestic capital accumulation and attract foreign investments. An ever-higher proportion of young Vietnamese completes high school, college, and technical training programs. Globalization has brought technology transfers and linked the economy to global trade and information networks, and these have all dramatically enhanced the productivity of domestic resources. But investments in skills, technology and innovation take many years to bear fruit. By comparison with most of its neighbours in East and Southeast Asia, Vietnam in 2010 has taken only the first few steps along this path. The increasing prosperity of the majority of today's Vietnamese workers will depend greatly on the efficient and dynamic applications of their labour, land and other natural resources to greatest economic effect.

In this endeavor, Vietnam's farmers, workers and entrepreneurs will rely heavily upon the support and encouragement of the Vietnamese state. Growth and globalization increase the productivity of labour and land in their current uses but also through new and more productive applications. But the biggest constraint on growth—the scarcity of capital and skills needed to raise output per worker and per hectare of land—cannot be adequately addressed by private investments alone. There are many areas in which the social gains from investment exceed private gains, and which would thus be underprovided in the absence of state actions. These include many forms of public goods, such as irrigation and education, and the institutional setting in which market transactions can take place. The state also has a social obligation to ensure that the benefits of growth reach the poorest and are distributed throughout the population. Ideally, these growth and equity goals are reached through its long-term development strategies and its short-term responses to shocks from the world economy. The 2011-20 Socio-Economic Development Strategy, the third of its kind since 1991, is intended to provide a road map for that support. We are pleased to be able to contribute to the SEDS drafting process through our research and analysis of labor, employment and urbanization in Vietnam.

This paper, on labour, addresses issues in the mobilization and use of one of Vietnam's key productive resources. It has been written together with a companion research paper on agriculture and rural development also in support of the SEDS drafting process, which addresses issues in the use of the other key resource, land. By comparing Vietnam's experience with those of its regional neighbors, and by evaluating current and potential future policy settings, each paper attempts to identify successful strategies and propose means by which the country's existing wealth can be deployed to the greatest benefit of current and future generations.

Lessons from comparative experiences

A large part of this paper is devoted to a review of regional experiences relevant to Vietnam's case. We note considerable cross-country variation in initial and historical conditions, which complicates direct comparisons. We observe common patterns of policies and outcomes among successful Asian economies, and derive five general insights which allowed them to grow with equity:

- 1. Successful economies initially concentrated on labour-intensive, export-oriented industries, which ensured rapid employment growth and maintained a balance between employment growth and productivity growth.*

The (inevitable) exceptions to this statement are (1) natural resource sectors in Southeast Asia, where capital-intensive mining, forestry and oil/gas industries have made important contributions to growth, and (2) South Korea, where an authoritarian government's complete control over the capital market and high protective barriers for industry made a heavy industrialization strategy feasible in the 1960s and 1970s. However, the conditions that made Korea's strategy feasible no longer exist for any country. In general, Newly Industrializing Economies (NIEs) achieved rapid output and employment growth through labour-intensive industries while relying on skills acquisition to ensure productivity growth in the longer run, thus finding a balance between employment growth and productivity growth (Islam 2009). China and India (and also Vietnam) have been growing at very high rates, yet labour demand growth has barely matched growth of supply. So factors other than output growth must be at play in constraining employment in these countries. The discussion so far has identified three such constraining factors: an emphasis on capital-intensity at early stage of development when labour excess is severe; an incentive structure unfavourable to labour-intensive industries; and the failure to promote labour mobility. These policy mistakes made by China and India provide important lessons to Vietnam.

- 2. The supply of educated and skilled labour kept pace with, or was even ahead, of labour demand, avoiding growth slowdowns and rising wage inequalities*

In parallel to substantial wage increases across the board, wage differentials by occupation, educational level, sex or age decreased significantly in the NIEs, in particular South Korea and Taiwan (Okunishi 1997). This is due to the success of NIEs' human resource development and vocational and educational training programs, which achieved two goals. First, these programs increased the supply of skilled

workers, avoiding rising wage inequality due to scarcity of skilled workers. Second, these programs upgraded the skills of blue-collar production workers, increasing their productivity relative to white-collar workers. Okunishi (1997) explains that as the NIEs become more dependent on quality products rather than cheap products, the improvements in productivity of blue-collar workers helped narrow the wage differential.

3. Labour market policies encouraged regional and sectoral labour mobility and maintained labour market flexibility

a. absence of policies protecting only a small proportion of modern sector workers

b. minimal restrictions on internal migration

A large proportion of the poor population in every country lives in remote areas, away from the center of growth. In order for them to share the benefits of growth, they should be allowed to move freely to growing regions and to enter expanding sectors. The NIEs tended to have flexible labour markets; as a result, regional and sectoral mobility was high, and they transited quickly and smoothly through the Lewis turning point (a point beyond which a developing country no longer has surplus labour). China and India have various barriers to labour mobility; as a result, they are having difficulties with the absorption of surplus labour and are experiencing rising inequality.

4. A balance between enterprises of different sizes and of different labour productivity levels

Leaving the economy to market forces alone, smaller enterprises might not be able to grow fast. An unequal distribution of earnings usually springs from the fact that a small proportion of workers are concentrated in a few large enterprises having very high labour productivity and hence high wages, while the rest of the workers are in a large number of small enterprises having very low labour productivity and hence low wages (Richards 2001). This has been seen in India, whose employment distribution is often known for having a “missing middle”. Taiwan and Hong Kong, on the other hand, are examples of even distribution of firm size and labour productivity, and therefore, equal distributions of earnings.

South Korea is well-known for its support of very large enterprises or conglomerates, which might have been critical in developing new products, entering new markets, and capturing export shares. But this policy began to be reversed in the 1980s, when the need for entering and capturing new markets and developing new products was less urgent than the need for maintaining competitiveness. Large firms ran into problems of high labour and management costs, so smaller enterprises had to be brought in. The inequality index of South Korea peaked in the late 1970s when the country was favouring large firms, but then dropped significantly as the country reversed this policy (Richards 2001).

5. *Adequate investment in the infrastructure of urban areas, allowing the urban sector to grow and absorb labour surplus from the rural sector*

In the absence of highly discriminatory government policies, industries (other than those dependent on a fixed resource, such as a mineral deposit) earn higher profits by locating close to each other, to providers of services such as banking and finance, and to ports and other key infrastructure. Cities allow firms to capture such scale economies. Underinvestment in urban development raises industry costs and imposes other burdens on growth, and also generates potential for economic and social conflict. In short, promoting industrialization necessitates support for urban growth. This places a responsibility on the state to ensure that cities can grow in an orderly and efficient manner. This is not to suggest that rural-based development is not important, but rather that there are preconditions for economically efficient rural industrialization to take place without large subsidies. The dispersal of U.S. manufacturing (other than processing of agricultural and resource products) away from large cities did not begin in earnest until after the construction of the interstate highway system. This, together with a thick network of railroads, canals, and air links, reduced transport and communications costs sufficiently to make relocation profitable.

Trends in global and regional economy

In considering current trends in the global and regional economy, we emphasize the role played by the large and rapidly expanding Chinese economy, which significantly increases the global supply of surplus labour. The majority of developing Asian economies have been drawn into the China-centered international production network, resulting in some cases in major changes in production structure and the volume and direction of their international trade (Lall and Albaladejo, 2004; Coxhead, 2007). This reorientation toward China has had three big types of sectoral impact. First, just as in rich countries, the producers of labour-intensive manufactures have encountered intense competitive pressures. Second, natural resource export industries have enjoyed a sustained commodity price boom (recent fluctuations notwithstanding). Third, manufacturers of skill-intensive goods such as components for computers, phones, and other electronic devices have found opportunities to expand through participation in so-called “fragmentation trade” (i.e. trade in partly finished manufactures) with China.

While Vietnam benefits from exports of resource-intensive goods, its labour-intensive manufacturing is facing stiff competition from China. What is the implication on Vietnam’s long-term development? Regional experience, notably that of Indonesia, provides insights into alternative futures for the Vietnamese economy, and draws attention once again to policy choices that can guide the economy’s path. Indonesia shares with most other middle-income economies a declining growth rate of skill-intensive exports in relation to total exports (China is the exception). During the 1990s, Indonesia’s exports of goods classified as ‘high-tech’ in the World Development Indicators rose from negligible values to just above 16% of manufacturing exports—and most of this was in reality the labour-intensive assembly of integrated circuits and consumer electronics. This share has since fallen sharply. More worrying still, Indonesia’s contribution to global exports of labour-intensive manufactures, and the

contribution of these products to its own employment and export earnings, has also diminished since 2000 (Coxhead and Li 2008). The country now faces the threat of a loss of its 'low-end' manufactures to lower-cost competitors such as Bangladesh, without the chance to move up to 'high-end' exports of the type that have been successful in Thailand and Malaysia. This poses a serious threat to employment growth, aggregate growth, industrial transformation, labour productivity growth, and domestic returns to skills. Faced with these prospects, the best-trained Indonesians could easily decide to relocate internationally rather than face low and uncertain returns domestically, leading to a brain drain and reduced social returns on public investments in education. In spite of some important differences between Vietnam and Indonesia, we believe that the similarities are sufficiently strong that Vietnamese policy makers could look to that country for lessons on ways in which the global economy has buffeted, and perhaps damaged, prospects for growth in a small, low-income, skill-scarce, labour-abundant economy.

Vietnam's labour market and urbanization issues

Through analysis of Vietnamese data in comparison with neighboring countries, we observe the following labour market and urbanization issues. First, output growth has not been sufficiently employment-intensive. In particular, the manufacturing sector has not generated a huge jump in jobs relative to output, as happened in other countries such as Thailand when undergoing similar transitions (Coxhead and Jiraporn 1999). This has slowed the pace of structural change in employment, leaving a disproportionate number of workers in agriculture, where productivity is very low. The service sector, while generating much new employment, has low productivity, low wages, and low job security.

Second, while productivity has improved in most industries, there is evidence of widening productivity gaps in the most productive sectors. Moreover, there remain large productivity differentials between large enterprises in the state sector and SMEs in the private sector. Yet these productivity differentials are a result of government support for SOEs, not a result of the true productivity potential. Once these supports are controlled for, private SMEs turn out to be more productive and they also generate a lot more jobs. As explained earlier, a balanced mix of enterprises of different sizes and productivity is an essential feature allowing the NIEs to grow with equity. Vietnam should try to do a better job of creating this balance.

Third, Vietnam's supply of educated labour needs to grow faster. In spite of very rapid GDP growth, the Vietnamese labour force is low-skilled and is not catching up with its regional neighbours. A key contribution to the success of the NIEs was their heavy investment in human capital at an early stage, even ahead of effective demand. This helped them avoid 'sudden stops' of growth (as experienced by Thailand in the mid-1990s), instead facilitating a smooth transition from labour-intensive to skill-intensive industries. The SE Asian economies, in particular Thailand and Indonesia, have been much slower to invest in human capital. Vietnam should try to avoid such mistakes. Fourth, urbanization inevitably accompanies economic growth, and much should be done to support orderly and effective urbanization rather than trying to restrict

it artificially. To starve cities of funds needed to plan and develop is equivalent to raising the costs of urban-based industries, by raising real labour costs and creating disincentives for workers to seek urban jobs. Official predictions of future urban growth almost certainly underestimate true rates, and if fiscal transfers and public investments are based on these numbers rather than more realistic data (Ninh and Vu 2008), then it is likely that Vietnam's megacities in the future will more closely resemble Jakarta or at best Bangkok, rather than Seoul or Taipei.

Insights for Vietnam: Role of the state

Growth and globalization induce large changes in the structure of production and consumption, and cause labour, land and other resources to be reallocated constantly among activities. Where these changes are consistent with long-run social welfare (if they do not, for example, threaten environmental sustainability or introduce unacceptable levels of risk), the role of the state is to facilitate them. Where public goods (infrastructure, education and institutions) are deficient, the state should provide them. In short, the state should support the movement of resources into activities where globalization raises potential output and productivity, and ease adjustment out of activities where globalization lowers these. For example, fiscal policy should be used to compensate and retrain workers in industries whose existence is threatened by global competition, so that they can join industries that are flourishing. This is standard practice, even in highly decentralized capitalist economies like the United States.

Vietnam's development strategy has undergone remarkable changes since the late 1980s. In the first two decades of *doi moi*, the economy responded strongly, rebounding from the low growth performance of the post-war command economy era. But many *doi moi* reforms and associated growth dividends were associated with the transition to a market-based economy, rather than being produced by features inherent to such an economy, and as such were one-time gains. This raises the question of what will sustain growth into the future, and what policies will best support that growth. Alongside this question is a second, equity-related one: what will be required to ensure that growth is robustly pro-poor, ensuring that welfare improvement can be sustained among the poorest and less privileged members of society?

Making predictions about the effects of economic and policy changes is a procedure fraught with uncertainty. Policies applied to the macro economy, including labour markets, have pervasive effects on prices, production, incomes, and household welfare. To grasp these in their entirety, one approach is to use counterfactual economy-wide models. These models integrate the links between labour mobility, productivity, wages, employment, poverty and income distribution in a consistent manner. They thus help to quantify some of the qualitative insights from our comparative review, and also help clarify and 'unpack' the role of the labour market as a channel for distribution of gains from the expansion of a specific sector, or region-for example the growth of urban-based industries.

Our experiments with such a model, reported in more detail in the paper, illustrate as an example the growth of labour-intensive, export oriented industries like garments,

footwear and furniture. In Vietnam's previous two decades, these industries have expanded greatly as the result of liberalization and globalization; they have also been magnets for increasingly prominent injections of FDI. Since those industries are labour-intensive, we also expect that their growth has been pro-poor. A larger question is whether the benefits of this growth have extended broadly into the population, or been limited to urban-based populations. This question is important to address first because Vietnam has pronounced comparative advantage in labour-intensive manufacturing, and second because it has continuing problems of labour immobility- in spite of what appears to have been strong inflows of migrants to the largest cities. Levels of output per worker in industry that are persistently many times higher than in agriculture confirm that many more workers could (and should) change occupations than have done so thus far.

In simulation experiments with the model we find that investment in labour-intensive manufacturing has very strong aggregate benefits and pro-poor effects- if workers are relatively free to relocate to take advantage of new jobs created. When rural-urban migration is costly or difficult, virtually all the gains from urban-based job growth accrue to urban workers; their earnings rise much faster than those in the rural economy. The immobility of labour excludes rural workers from the direct gains of growth and as such, contributes to a substantial widening of the urban-rural wage gap. Greater labour mobility changes this result in dramatic fashion: now, export industries can hire new workers from either urban or rural areas, and wage growth is at identical rates for rural and urban workers of each type. The gains from urban-centered growth spread definitively to the countryside as rural workers take advantage of opportunities to move to higher-productivity, higher-wage occupations. The urban-rural wage gap for unskilled workers thus diminishes.

This is just one illustrative experiment, but the lessons it conveys are nonetheless important. The lessons underline both the complementarity of growth with labour mobility, and also the function of labour mobility as a channel for spreading the gains from globalization and growth. Freer labour mobility ensures faster overall growth, and also a much broader distribution of the gains.

One implication of this result is that when labour mobility is high, the demand for public policies to redress urban-rural inequality of income and opportunity becomes smaller. Here, Vietnam has an opportunity to learn from policy mistakes committed in China. That country's "Go West" policies, pumping massive quantities of public investment into inland provinces, are part compensation for the continuing segmentation of its internal labour market due to formal restrictions on internal migration. More positively, the results of this experiment suggest that in Vietnam, careful attention to meeting the requirements for urban-based industrial growth may substantially reduce the price tag of rural development strategies and still be consistent with social goals of growth, poverty alleviation and equity.

In sum, urban and rural development expenditures need not be a zero-sum game, and given the scarcity of public resources, priority must be given to policies that can effect

the biggest desirable outcomes. Vietnamese policymakers are right to be concerned about rural development issues and the growing rural-urban gap, but a careful analysis of regional experiences coupled with economic modeling done using Vietnamese data have shown that a positive focus on urbanization, future-oriented urban planning, and unambivalent support to labour mobility can best help achieve the difficult challenge of balanced and equitable growth.

Strategy recommendations

Medium-term strategies: create jobs and solve unemployment and underemployment issues

For a developing country such as Vietnam in which labour surplus, poverty and low income remain major concerns, creating jobs and reducing unemployment and underemployment are the first, and most pressing, tasks of development policy. This means that Vietnam must continue to encourage the growth of labour-intensive industries, especially those tradable industries in which it can hope to capture or gain global market share. This was the strategy successfully pursued by the NIEs and some Southeast Asian countries during comparable periods in their own development. It should also create and strengthen conditions favorable to the growth of private sector firms and especially SMEs, even those in the informal sector and services, because this is where the majority of the jobs are created. Vigorous development of the agricultural and rural economies, where half the labour force is currently located, is also central¹. Fortunately, since unskilled and semi-skilled labour is a primary income source for the poor, any strategy targeting rapid employment growth is also most likely also to be strongly pro-poor. The prospect of growth with strong linkages to the poor further strengthens the case for a labour-intensive strategy. To promote labour-intensive growth, we recommend the following policies or policy reforms.

Supporting macroeconomic environment. The macroeconomic conditions needed to sustain growth, and to ensure that it is relatively labour-intensive in nature, are wide-ranging. On the whole, Vietnam has performed increasingly creditably in these areas. Trade and investment policy reforms in the lead-up to WTO accession in 2007, plus a generally credible exchange rate policy have encouraged substantial inflows of FDI and discouraged domestic capital flight. Over time, these reforms have also begun to shift the emphasis of new investment away from capital-intensive heavy industry projects, mainly undertaken as joint ventures with SOEs, toward labour-intensive assembly and light manufacturing, either wholly foreign-owned or in partnerships with domestic SMEs (Athukorala and Tran 2008). The gains of these reforms are threatened by the global financial crisis, which has substantially reduced external demand for Vietnam's manufactured output, and by the ongoing difficulty in controlling domestic inflation. To sustain a stable macroeconomy will require coordinated monetary and fiscal policy actions by the government and the State Bank of Vietnam. It will also place a high premium on the efficient and non-inflationary use of public expenditures, whether in any new stimulus packages or in long-term development policy.

¹For more on agricultural and rural development see SEDS Paper No.7, on agricultural modernization and rural development.

Sectoral and factor market policies. Policies applying to individual industries or factor markets must support the expansion of labour-intensive activities, especially in tradable (export-oriented or import-competing) areas. Once again, WTO accession has removed many of the most distorting features of Vietnam's trade policy regime, which previously conferred disproportionate benefits on capital-intensive industries (in practice, SOEs). These distortions persist in somewhat diluted form, both in the residual trade policy measures and, importantly, in capital subsidies and the regulatory treatment of SOEs versus private sector enterprises (Athukorala 2006). Capital subsidies to SOEs and their "equitized" successors (which are in practice mainly still state-owned) have two consequences for employment: they crowd out domestic and foreign investment in more labour-intensive, export-oriented industries, and they intensify competition for other scarce resources, most notably skilled workers. Higher costs of physical and human capital reduce profitability in labour-intensive industries. In addition, to the extent that favoured treatment for SOEs gives them quasi-monopoly status, especially in domestic markets for inputs such as construction materials, their exploitation of this position further adds to the costs of private-sector initiatives. China's open-door policies and its integration into the global economy required a heroic act of political will in which many SOE-dominated industries were sacrificed for the greater good of employment generation and international competitiveness of labour-intensive industries. Vietnam now faces a similar challenge. If it is to retain privileged sectors, then the government must calculate the cost in terms of growth opportunities foregone and distributional inequity made worse-by their retention.

Policies to promote labour mobility. The creation of new jobs has no impact on growth or poverty if workers cannot take advantage of them. Because most new investments are concentrated in cities, policies must support both the occupational and the spatial mobility of labour. Workers must be given opportunities to move out of rural areas and agriculture, and into urban or peri-urban areas and industry or services where their labour commands a higher price and generates more value. This involves policy reforms not only in the labour market but also in land and credit markets. Continued liberalization of land laws would allow farmers to convert their wealth into another form of capital (such as education) and existing agriculture, improving their labour mobility. Sponsoring or permitting the expansion of a variety of microfinance and revolving credit systems would help enhance farmers' access to credit, allowing them to finance costly migration.

Finally, at the other end of the occupational and spatial mobility line are urban areas. The more under-invested and unprepared cities are, the greater the cost of finding jobs and moving to new urban residences, the more hindrance to labour mobility. This is made worse by the persistence (where it does) of residence-based barriers restricting migrants' access to schools, clinics, and other social services. Vietnam has to decide, soon, that as Ho Chi Minh City (and perhaps Hanoi) are going to become megacities, they should be provided with the financial and planning resources necessary to grow in a managed way, delivering social and economic benefits rather than suffering from costly and disruptive congestion, pollution, sprawl, and haphazard development. This may require reorienting the current system of fiscal transfers among subnational units (Kim Ninh and Vo Thi Thanh 2009).

Long-term strategy: build skills and cities

After employment creation, the second overwhelming lesson from comparative experience is the need to plan, and create, an adequate human capital base ahead of demand. Growth in output per worker, or labour productivity, is the mainspring of long-run economic growth. A country that fails to promote and sustain a skilled labor force and growth in labour productivity risks falling into a ‘lower-middle income trap.’ In this trap, firms do not innovate or invest because there are not enough skilled workers, while workers do not acquire education or training beyond a basic level because there is insufficient domestic demand for skills. This is a coordination failure problem, and as such cannot be solved by private actors alone. It requires policy action. The government has a mandate to use development policy to help avoid the trap by investing in a skilled labour force. The positive experiences of the NIEs, and the negative experiences of Thailand and Indonesia, make this clear as a long-term policy priority for Vietnam.

The logic of the development process leads to a chronological sequencing of development policies: first solve unemployment and promote occupational and spatial labour mobility, and then plan for the future by supporting education, skills accumulation, and capital investments by firms that will create jobs for skilled workers. But the experience of the most successful East Asian economies (and the counter-examples of Thailand’s late 1990s crisis and the pronounced slowdown of the Indonesian economy) suggests very strongly that human capital investments must begin well before the demand for skilled workers becomes a constraint on growth. Enhancing the mobility of labour up the skills ladder must therefore begin early, in order that potential investors can perceive the scope for adequate returns on skill-demanding capital investments.

Our data show that Vietnam has already begun to fall behind the regional curve for skills acquisition. Recent diagnoses suggest current vocational training programs are not effective: they tend to be top-down and supply-driven, and as a result do not result in skilled, employable workers. The successful model of skills acquisition is not for government to “go it alone”, but to form partnerships with industry that raise educational productivity, stimulate counterpart private investments, help match supply with demand, and reduce costs all around. Furthermore, the current vocational training programs suffer from the common “two targets, one instrument” problem: in addition to providing training opportunities, they are designed to help redress inequities in income and opportunity (given their geographical targeting feature). Locating a poorly designed vocational training program in a disadvantaged area serves neither the goal of skills acquisition nor that of reducing inequality or poverty. The Vietnamese government should reevaluate its current vocational training programs with the goal of making them more focused on their core goals, more responsive to industry demands, and thus more likely to attract counterpart funding, both from trainees (in the form of tuition payments) and from their potential employers

Finally, the investment of public resources in increasing the supply of skills will pay off for society only if rewarding jobs exist. As with the job creation problem, city

development is clearly a vital component of this strategy. Cities house concentrations of skill-intensive industries, and the agglomeration of such industries in a central place is known to further enhance output per worker through information spillovers across firms and workers. If cities are costly, congested and lacking in basic services, firms will be reluctant to make investments and skilled workers will have incentives to seek more productive employment, and more satisfying living conditions, elsewhere – including overseas. A well-financed, carefully planned urban development strategy, like so many other policies, is indirectly also a labour market development policy.

In summary, we advise that in 2011-20 the Vietnamese government pursue the following strategies:

1. Adopt policies aimed directly at eliminating the labour surplus. Encourage labour-intensive industries, promote SMEs, self-employed workers/households and the informal sector. As a vital component of employment creation, ensure that potentially mobile workers have every chance to learn of, and take advantage of, opportunities in other occupations and locations.
2. Be fully committed to the investment and development of human capital to create a supply of skilled labour that is ahead of demand, with the goal of creating fertile conditions for more skill-intensive capital investments and technologies.
In implementing these strategies, the Vietnamese government must maintain the five features which allowed the NIEs and successful economies in Southeast Asia to grow with equity: employment growth must be inclusive; investments in human capital must be timely and equal; labour mobility must be fluid; discriminations among different types of enterprises must be removed; and urban infrastructure must be adequate.

PREFACE

Scope and goals of the research

The main task of the assignment is to produce a comparative analysis of international experience, draw key lessons, and recommend strategies and policies for Vietnam to achieve the following two objectives: (i) generating productive and equitable employment, (ii) managing associated outcomes of growth and structural change in employment, in particular urbanization and sub-regional development.

A note on country comparisons

Much of this document is concerned with examining Vietnam's recent labour market and urbanization experiences by drawing on comparative data from regional neighbors. Economies vary in infinite ways, and comparisons are difficult to draw. Successful examples of comparative analysis must be sensitive not only to the choice of comparator, but also to the need to match countries at comparable stages in their development process. For country responses to short-run shocks such as the 2008-09 global economic crisis, it only makes sense to use contemporaneous data. But for examinations of long-run growth, it is often more relevant to compare countries at similar points in their development experience.

For Vietnam, the logical comparisons are with other developing economies in East and Southeast Asia. The experience of this region of the world is unique. Neighborhood effects are important, as are baseline characteristics like geography, climate and history. Comparisons with countries in other world regions would for the most part be confounded by differences associated with regional characteristics.

Within this region, some countries present very helpful comparisons. In general we include in this group the newly industrializing economies of East and Southeast Asia (Korea, Taiwan, Hong Kong and Singapore) and the poorer yet also strikingly successful Southeast Asian economies (Thailand, Indonesia, Malaysia). China and India are the other relevant comparators. Other economies are either too different from Vietnam, or lack adequate data.

For some purposes we are primarily interested in contemporaneous comparisons. Section 2 takes this approach, although to control for different historical circumstances we do break our discussion down into more homogeneous subgroups of countries. For other purposes, and especially for comparing progress in economic development, it makes more sense to acknowledge different starting points. Vietnam began to make serious efforts to grow through global economic integration only after 1986, whereas most of its regional neighbors had already been engaged for one to three decades. In this case it helps to assess Vietnam's progress against a development benchmark rather than a common chronological path.

Appendix 1 shows three indicators of achievement in economic growth and development for the economies in this group that are most similar to Vietnam. If we take as a reference point the year 2000 – a little over one decade into the implementation of doi moi reforms – then based on GDP per capita in constant US dollars of 2000, the only data that are close to Vietnam are China in 1990, Indonesia in 1980 and Thailand in 1960. Comparisons based on purchasing power parity (PPP) are similarly limited, as the table also shows. These measures seem to reflect too narrow a definition of growth accomplishments. By contrast, the broader Human Development Index measure, which includes life expectancy and literacy measures along with GDP per capita, suggests that Vietnam in 2000 is comparable with Indonesia in the current year, with China in 1995, and with the other Southeast Asian countries in 1985. In section 3 in particular, we adjust the time scale from chronological to developmental, comparing Vietnam in 2000 with the other countries in earlier years.

1. ECONOMIC GROWTH, LABOUR AND URBANIZATION: AN OVERVIEW

1.1. The importance of the labour market

Economic growth is measured as a rise in per capita GDP. Labour supply and the productivity of labour are central to economic growth. A simple decomposition equates per capita GDP (Y/N , where Y is GDP and N is population) to the ratio of output per worker (Y/L , where L is the size of the labour force) and the dependency ratio (N/L), which is the size of population relative to the labour force:

$$\frac{Y}{N} = \frac{Y}{L} \bigg/ \frac{N}{L} \quad (1)$$

This expression says that economies with more productive labour and lower dependency ratios enjoy higher per capita income, other things equal. Growth of per capita income (i.e. a rise in Y/N) can be attributed either to a rise in labour productivity or a fall in the dependency ratio. The latter is due to demographic factors such as birth and death rates as well as the rate of labour force participation, and changes very slowly. Instead, the historical record tells us that most growth comes from factors that raise labour productivity. Among these, the main contributions come from investments in infrastructure, physical and human capital, increases in natural resource wealth, technical progress, and the improvement of legal and political institutions that provide and support incentives for efficient resource allocation. In other words, sustained improvements in labour productivity reflect broad progress in the fundamental building blocks of growth. Conversely, deceleration or stagnation in labour productivity growth is often indicative of deficiencies or coordination problems that need to be addressed.

A growing economy does not merely expand, however; its structure also changes. ‘Sunrise’ industries appear and grow, and ‘sunset’ industries contract and vanish, and with these changes, different kinds of jobs are also created and destroyed. This means that growth requires continuous reallocations of labour. If investment, technical progress and institutional changes make up the engine of economic growth, then labour mobility is the lubricant that keeps the engine running. Without it, growth cannot be sustained.

For labour, mobility has three distinct meanings. One is occupational mobility, meaning the capacity of workers to change jobs. Another is educational or vocational mobility, meaning the capacity of workers to acquire skills that raise their individual productivity. The third is spatial mobility, meaning the capacity of workers to relocate as necessary to take advantage of jobs created by location-specific capital investments. Each form of mobility is essential to growth, and in many cases one form of mobility requires or implies another - for example when occupational mobility depends on the acquisition of vocational training, or a move to a new location.

The mobility of labour is not simply a passive response to employer demand, however. Individuals and entrepreneurs perceive opportunities, take risks, and invest their own resources—for example in education or migration. Because of this, the allocation of the labour force to occupations, tasks and locations is not something that can be achieved by planning alone. The existence and relatively unfettered operation of a market for labour, and for skills embodied in individual workers, is crucial to the efficient matching of workers with productive opportunities. When the labour market works well, there is a virtuous circle in which labour mobility sustains economic growth, and growth promotes labour mobility. A good measure of efficient labour market operation in the context of economic growth is that labour productivity is not only rising with growth, but also converging within skill categories across occupations. By contrast, large regional or occupational disparities in returns to workers of broadly similar skills are a sign that labour markets are not working well. In productivity terms, part of this valuable resource is being “left on the table.”

In practice, there are many constraints to labour mobility, many of which cannot be resolved by individuals acting alone. These constraints are of many types. If capital markets don't work well, workers cannot access credit and may be unable to cover the explicit and implicit costs of schooling or vocational training. Poverty, or the need to satisfy basic needs at the household level, may induce risk-averse behavior that also restricts workers' choices. Uncertainty, for example over property rights to land and other fixed capital, may prevent workers from deciding to move to another location. These are just three examples. Each such constraint is a source of inefficiency: by limiting labour mobility, it reduces potential for economic growth.

Labour policies can overcome some constraints. Education and training are good examples, in which public provision or subsidization reduces the cost to individuals, making skills acquisition accessible to a wider group. Policies addressing the sources of labour productivity growth, such as investments in infrastructure and information networks, are also of great value. Even the best-designed policies are not a panacea, however, and moreover, the history of modern economic development reveals many examples of policies that had the unintended consequence of limiting labour market development through some indirect and unexpected channel. Thus the design of economic policy in general, and of labour market and labour-related policies in particular, is central to the task of sustaining economic growth. This places a very high premium on good policy design, as even quite small policy errors can have large efficiency and welfare costs—just as relatively minor improvements in policy may enhance the earnings and prospects of millions of workers.

When an economy participates in international trade and investment, a new dimension is introduced. International trade in goods embodies and responds to national differences in factor endowments and productivity. Foreign direct investment and labour exports respond to the same signals, taking advantage of opportunities created by endowment differences among countries. Trade and FDI, when they occur, are additional stimuli to mobility in the domestic labour market, and when labour can respond, its productivity rises, thus increasing economic growth. Therefore, in a developing economy that is also becoming progressively more globalized through international trade and FDI, both

the pace and the direction of change in the structure of production and employment are altered. And once again, the interactions of policies – here, notably, trade and exchange rate policies and those governing and influencing FDI inflows – are especially important for the labour productivity and the allocation of workers throughout the economy. These considerations are especially important in Vietnam.

Finally, another important consequence of international integration is that events in the world economy or decisions made by a large trading partner may have exogenous implications for the productivity of its own workers – and thus for its optimal development strategy. Long-run declines in the costs of international trade are certainly influential in this way, rendering many types of goods and services tradable when previously the cost of trade was prohibitive. Import barriers imposed by the governments of other countries are another example.

The most outstanding recent example, however, of the exogenous influence of international trends is the emergence of China and India in the international economy. As those countries have (re)entered the global marketplace (trends measured by the rapid rise of their trade to GDP ratios), the growth of employment in their tradable sectors has been equivalent to the addition of hundreds of millions of new workers to the global endowment of low-skilled labour. From about 1990 until the onset of the 2008 global economic crisis, this shift resulted in record high and rising corporate profits and ever-lower global prices for labour-intensive manufactures. As more producers of labour-intensive goods enter the global marketplace, success in attracting and retaining industries that employ low-skill workers comes to depend increasingly on efficiency and openness in the trading structure. Frictional costs, for example inefficient freight handling and slow customs procedures in ports, can induce industries to relocate, often with great rapidity, taking with them hundreds or thousands of jobs. In this way, trade-related policies and procedures in a globalized economy are seen to be labour policies in another guise.

The importance of labour markets and policies extends beyond economic growth, to household welfare and to social issues such as equity and justice. For the poorest households, labour is the primary source of income. Job creation and labour productivity growth are thus key determinants of rising incomes for the poor. Raising labour productivity is arguably the most direct path to poverty alleviation, and because ownership of labour is inherently very equally distributed, widespread job creation tends to have an equalizing effect on incomes. Thus, in addition to their role in facilitating economic growth, well-functioning labour markets perform a second, equity-related function, that of distributing the gains from growth broadly across the population.

Because of these dual roles, economic policies that impact upon labour productivity, or those that enhance or limit the occupational or spatial mobility of workers, may have enormous social impact. As noted above, policies aimed at resolving a specific social issue may have unexpected effects on other objectives through their effects on the labour market. Urbanization policies provide excellent examples. Many countries, among them China and Vietnam, have experienced conflicts between seeking to facilitate labour mobility as a means to accelerate economic growth, and at the same

time seeking also to limit rural-urban migration as a means to manage the growth of large cities. Restricting the flow of workers to cities may help solve an urban planning problem, but shutting many would-be migrants out of the urban labour market imposes a constraint on labour mobility and so slows the pace of economic growth. This is a hidden cost of policies that limit migration. In summary, as with the trade policy example above, certain types of social policy also operate as labour market policies in another guise.

In this introductory discussion we have emphasized labour mobility—broadly defined to include occupational, spatial and skills-based mobility, and dependent on the existence and operation of labour markets—as complementary to the various non-labour sources of productivity growth. We have indicated at several points the ways in which labour market policies can influence this. We have, in addition, emphasized the potential for policies targeting some other economic or social issue to have indirect impacts on labour markets, with consequences for economic growth and/or household welfare and income distribution. These themes are all relevant to the current and future Vietnamese economy and will recur throughout the remainder of this paper.

1.2. Growth, wages, employment and migration

Before going into the details of labour, wages and migration in Vietnam, it helps to have a road map of the broad process of economic development, and of the role of the labour market in that process. The famous Lewis (1954) model of growth in an economy with surplus labour, with some minor modifications, provides a good starting point. Lewis posits an economy with a “modern” (urban/industrial) sector and a “traditional” (rural/agricultural) one. Industry employs capital and labour; agriculture employs land and labour. Due to diminishing returns, workers in agriculture produce very little at the margin; however, for institutional reasons they are paid according to their average (rather than marginal) product. This income-sharing mechanism ensures all workers a more or less equal share in the agricultural earnings, so that rural labour incomes are more or less equally distributed. It also ensures, however, that there is initially “too much” labour in the agricultural economy. The proof of this is that some workers can be withdrawn from the sector without causing a reduction in farm output; in this case, there is a pool of surplus labour in rural areas.

If workers leave the farm, where do they go? For a given stock of capital in industry, there is demand for a fixed number of workers. To attract job-seekers, industry must offer a premium over the agricultural wage, to compensate migrants for the higher urban cost of living and for other costs associated with moving away from the farm and the village community. Viewed from the perspective of a prospective migrant, it is easy to imagine that in the real world the wage offer from industry should be high enough not only to compensate for higher living costs, but also to fulfill household-level expectations, for example that the migrant worker would also remit some part of her/his salary back to the village.

While this is obviously a stylized account, it also captures important general phenomena for an economy with many workers and little capital. Vietnam’s official data show very

low unemployment rates, but these are not corroborated by other indicators, and there is an abundance of narrative evidence to suggest high rates of underemployment among rural and agricultural workers. If so, this is consistent with the basic labour surplus conjecture of the Lewis model. It implies that if some workers depart for other employment, agricultural output need not fall because the remaining workers can increase the number of hours per day (or days per week) that they work. Because of this response, daily agricultural wages may be quite unresponsive to the decline in the number of agricultural workers.

So long as there remains a pool of underemployed rural workers, investment in the industry sector is the driving force behind GDP growth. New investments create new jobs, drawing in rural-urban migrants. (Of course, there may be some growth in agriculture as well; it matters only that industry growth occurs at a much higher rate than that in agriculture. This has certainly been the case in Vietnam during *doi moi*.) This form of growth displays the standard pattern of structural change: the shares of industry in GDP and total employment both rise, while those of agriculture decline. Labour productivity differentials between the two sectors may be high and persistent. In real terms, workers are about as well off in either sector (after part of the urban wage has been remitted to non-migrants), but the accumulation of capital means that total urban income (earnings on capital plus the wages of urban workers) rises much faster than rural income (earnings on land plus wages of rural workers).

Extrapolating from the standard model, we can easily observe that in the course of this process of growth and the accompanying structural transformation of production and employment, poverty must decline (Fields, 2005; Coxhead 2007a). However, it is equally clear that income inequality—between capital owners and workers, between rural and urban areas, between remittance-receiving rural households and others—must initially increase (Kuznets, 1955).

Despite the familiarity of the Lewis model, it is not always clearly recognized that the economic growth it describes has two distinct origins. One is accumulation of capital per worker through savings and investment—the familiar factor endowment effect. The other, less visible source is a gain due to the reallocation of workers from agriculture to industry. Because of persistent productivity differences between the two sectors, each worker that migrates from agriculture to industry contributes more to GDP. This movement of labour helps to correct an inefficient labour force allocation, and thus raises labour productivity and total income.

It follows from this that any limitations on migration—whether due to policies, or to market failures such as lack of access to credit, or institutional failures such as land tenure insecurity—reduce the economy's growth potential, and given the standard pattern of urban-based capital investments, exacerbate rural-urban income differentials. An additional consequence is that any development policy strategy implemented under such conditions of artificial (or at least curable) labour market segmentation is “second best” in the sense that it will cost more, and/or achieve less, than a “first-best” strategy that promotes labour mobility by lifting existing legal barriers, or by addressing the market failures that inhibit migration.

In Lewis' model, the pattern of growth and structural change continues as long as there remains a pool of surplus (or underemployed) labour in the countryside. Once all rural labour is employed full-time, any additional rural-urban migration begins to reduce potential agricultural output. To compensate, industry must begin to offer ever-larger wage premia to attract them (this is the so-called "turning point" of the Lewis growth model). As a result, real wages in rural and urban areas begin to converge, reflecting the convergence of labour productivity in industry and agriculture. Labour becomes the relatively scarce factor of production, and as such can capture a larger share of the gains from aggregate growth. So in the long run, per capita income is high and relatively evenly distributed; the population is more urbanized than before, but incentives for further migration are diminished. The central focus of development policy can now move on from a preoccupation purely with the fundamentals-initiating growth, reducing unemployment, alleviating poverty, and avoiding social conflict-to fine-tuning the process, seeking to ensure sustainability, quality of life, and long-run macroeconomic stability. This shift in the focus of policy accompanies the fundamental economic transition. As Vietnam anticipates joining the ranks of middle-income economies, a big question to ask is how development policy can be reformed, or designed anew, to facilitate the transition.

2. REGIONAL AND GLOBAL PERSPECTIVES ON DEVELOPMENT, LABOUR AND URBANIZATION

2.1. Regional comparisons of development experience

Vietnam is a regional latecomer to modern economic development. While this is an obvious disadvantage in terms of growth, it does present the country's policy makers with the opportunity to observe and learn from the experiences of neighbouring countries. In this section we review relevant aspects of recent regional development experience. We review approaches to promoting economic growth. We examine labour market institutions and policies and their impacts on employment, labour productivity, and urbanization. Subsequently, in section 3, we focus directly on the Vietnamese case in regional perspective.

By "region", we mean mainly East and Southeast Asia, although comparisons with other countries, such as India, are also apt. Among the countries of the region, it is well known that some have performed brilliantly by global standards, others have seen episodes of exceptional growth marred by setbacks and structural vulnerability, and others still have failed, in a few cases miserably, to sustain any kind of improvement in per capita levels of living. The strong overlap between economic performance and sub-regional location makes it tempting to apply cartographic labels to growth experiences (the 'East Asian model', the 'Southeast Asian model', and so on), but these labels distract attention from more fundamental differences that have defined contrasting growth paths. One group of countries-Hong Kong, Taiwan, South Korea and Singapore, known collectively as the Newly Industrializing Economies or NIEs- lacked either a large domestic market or a robust base of agricultural or natural resource wealth, and this placed bounds on their development policy options in the postwar era. Another group-among them, Indonesia, Thailand and Malaysia-were endowed with much greater resource wealth, and this has predetermined some aspects of their development path². China and India are two large economies with their own specific endowments and policies, and like Vietnam, are relative latecomers to globalization. We know that the NIEs have enjoyed by far the greatest success in economic growth. Vietnam, however, shares neither their initial endowment constraints nor their historical circumstances. Its endowments of oil and agricultural wealth resemble more closely its Southeast Asian neighbors, while the lateness with which it has opened to the global economy is more similar to India and China. Thus no single group provides a complete model, and there are policy lessons for Vietnam from each.

The contrasting growth performances of regional economies is vividly illustrated in Figure 1, which shows the path followed by per capita GDP in nine regional economies from 1960 to 2008. From relatively similar starting points, the NIEs have on average grown much faster in per capita terms than other economies. Southeast Asian

²We exclude the Philippines, Lao PDR, Cambodia and Myanmar from these comparisons. All these economies have experienced idiosyncratic failures of policy that resulted in macroeconomic instability and protracted periods of low or negative growth.

economies, on average, grew much faster than China, India and Vietnam—at least until the 1997-98 crisis, after which these later-developing economies began to catch up. As seen above in expression (1), GDP per capita (Y/N) can be read as the ratio of output per worker (Y/L) to the dependency ratio (N/L). Within the region, the NIEs were also early leaders in lowering the dependency ratio (Figure 2) although Thailand and China made rapid progress in the 1980s, just as Vietnam has in more recent years. These increases in the number of workers as a share of total population constitute the demographic “gift” in a country where birth rates are falling sharply, resulting in higher potential rates of economic growth.

Using information on per capita GDP and the dependency ratio, we can also compute the implied level and growth rate of output per worker, or labour productivity, as in expression (1). Figure 3 shows decade averages of real labour productivity (measured in constant US dollars of 2000). Not surprisingly, the labour productivity rankings and trends match those of per capita GDP. In 2000-08, labour productivity in the lowest-ranking NIE (Korea) was double that in the best-performing Southeast Asian economy (Malaysia). The effect of the 1997-98 crisis on Southeast Asian economies is clear from labour productivity growth rates (Figure 4). While those economies experienced a prolonged decline in growth of output per worker during and after the crisis, Vietnam and India made significant gains. These two economies were less exposed to macroeconomic risk, and moreover were beginning in the mid-late 1990s to reap the gains of significant economic reforms begun in the late 1980s. Even with those gains, however, by 2008 output per worker in India and Vietnam was only about double its 1984 level. In China, the other late-developing economy, output per worker soared by over 500% in the same period.

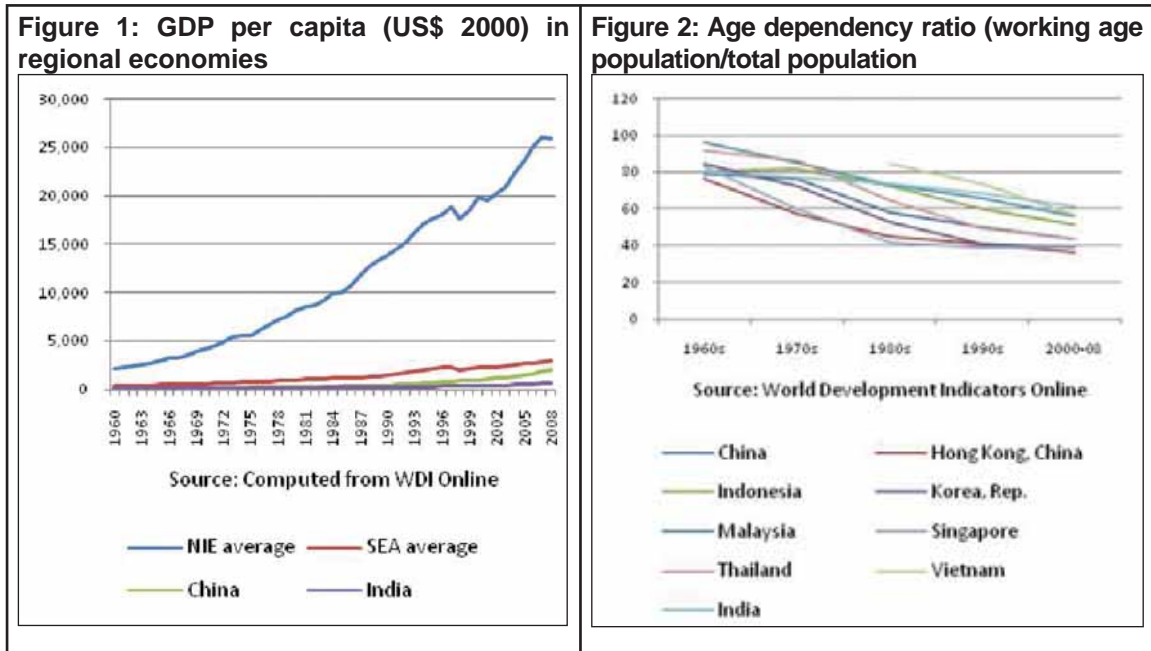


Figure 3: Decades' average of real labour productivity (US\$ 2000)

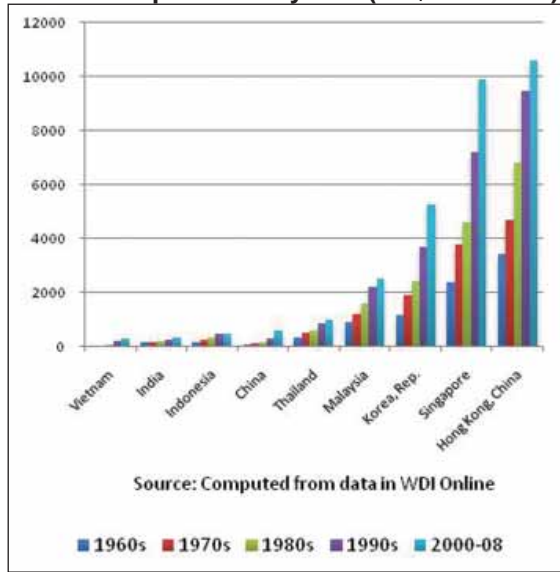


Figure 4: Real labour productivity growth (1984 = 100)

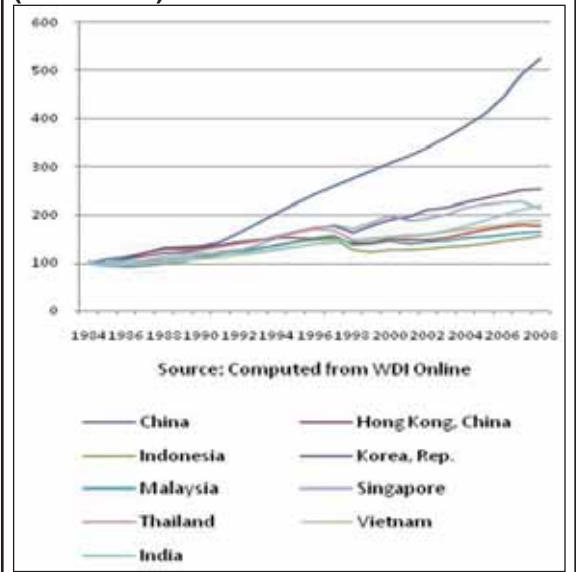


Figure 5: Agriculture value added (% of GDP)

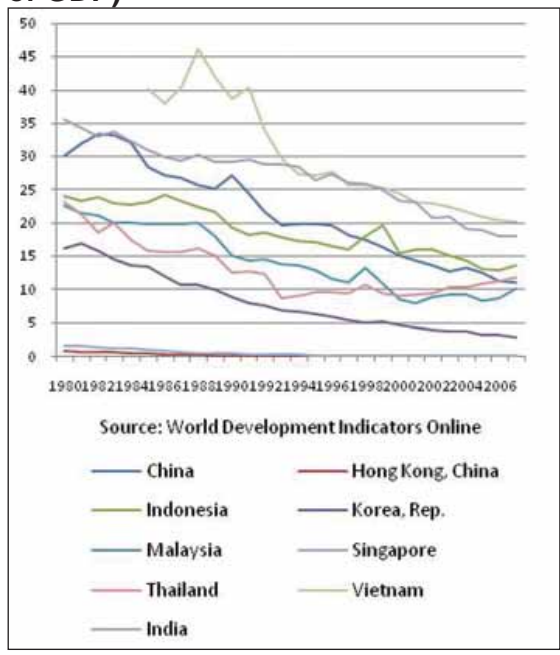
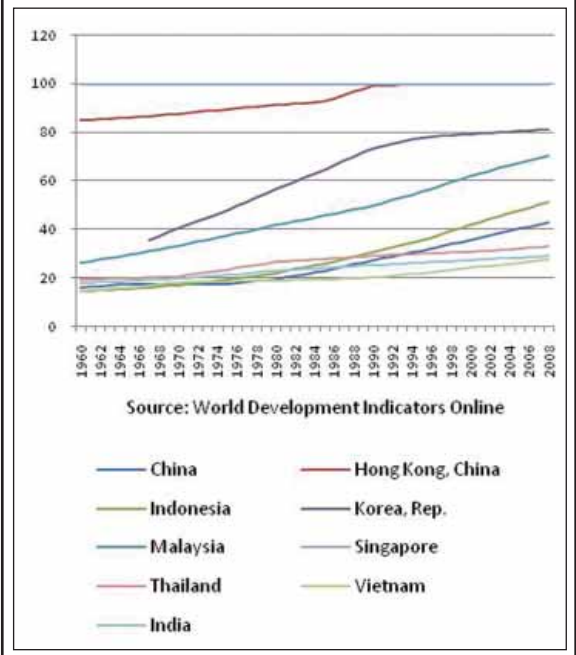


Figure 6: Urbanization rates (% of population)



Economic growth is associated with the relative decline of agriculture and with the rise of industry and services sectors, as already discussed in section 1. Growth of the latter two sectors is in turn tightly linked to urbanization. In Figure 5 we see the decline of agriculture's share in GDP across the region. Excluding the city-states of Singapore and Hong Kong, by 2007 non-agricultural sectors accounted for no less than 75% of GDP (Vietnam) and as much as 95% (Korea). This structural shift in the composition of income was reflected in urbanization rates (Figure 6)-although differing country definitions make this measure more difficult to compare. By 2008, official urbanization

rates ranged from 100% in the two city-states and 81% in Korea, down to 29% in India and 27% in Vietnam, with the SE Asian economies and China in between, with urbanization rates ranging from 33% (Thailand) to 70% (Malaysia).

With these broad data as background, we now turn to a more detailed discussion of labour and urbanization in each group of countries.

2.1.1. NIEs (Singapore, Hong Kong, Taiwan, South Korea)

Export-oriented manufacturing development and labour market transformation under conditions of land and natural resource scarcity

Growth and employment strategies and outcomes

The NIEs have achieved the most successful postwar development experience worldwide. At the end of World War II, these economies were characterized by low income, land and natural resource scarcity, and labour abundance. From the late 1960s they achieved very rapid growth of GDP (Figure 7) and employment, with low inequality. There was substantial increase in labour productivity (Figure 8) and real wages. Most notably, there were large reductions in wage differentials by occupation, education, sex and age, leading to overall low economic inequality (Okunushi 1997). All the NIEs had reached full employment and passed the Lewis turning point, becoming net labour importers, by the 1980s.

Figure 7: NIEs: Growth of GDP per capita (constant price US\$ 2000)



Figure 8: NIEs: Labour productivity growth (Year 2000 = 1)



The NIEs are special among developing countries in that they were initially small, resource-poor economies. There was no opportunity to exploit natural resource endowments for growth, and the domestic market was always too small to sustain inward-oriented industrialization behind high tariff barriers. From the outset, these economies had few options but to specialize in manufacturing for the global market. Though the development strategies pursued have varied greatly from country to country and over time, they have in common a very determined pursuit of competitiveness in

the global marketplace, and a willingness on the part of political leaders to permit (or in some cases, to cause) industries that prove uncompetitive to contract or to exit entirely. Initially, the successful industries in these export-oriented economies relied heavily on low-skill labour and simple technologies – as had earlier been the case in Japan. But as in the Japanese precedent, significant investments in human capital and skills resulted in rapid and steady progress up the quality ladder.

There is no doubt that the initial strategy of labour-intensive, export-oriented growth contributed significantly to these countries' astounding growth outcomes. During the early years of development, when unemployment and poverty were overriding policy concerns, measures that encouraged the expansion of labour-intensive sectors (including small-scale peasant agriculture and manufacturing exports) were essential as means to generate employment. Equally important to the maintenance of growth beyond the early years was the expansion and modernization of the agricultural sector, and increasing abundance of cheap and relatively educated labour. Both factors facilitated the transition to capital-intensive and knowledge-based economies (Manning 1998).

Labour market policies and institutions

The NIEs have been described as “Asian tigers with a dragon head” (Castells 1992) because they adopted similar policies and human resource strategies to achieve political stability and economic growth under development-oriented authoritarian regimes. During the Cold War, facing major international conflicts, these states established their legitimacy through integration into the world economy. Their economic policies emphasized export-oriented manufacturing both for the purpose of economic expansion and also for the establishment of national identity. Labour and urban development policies have thus linked directly to the twin goals of economic growth and social stability (Tai 2006).

During the early stage of development (1960s and 1970s), the NIEs had substantial excess supplies of labour, and the goal of generating employment was given high priority, along with strict population control policies. Labour market policies during this period were primarily concerned with increasing overall labour market participation, and with provision of vocational training and education to raise the supply of skilled workers. They were not greatly concerned with regulation of the labour market itself. Labour standards were not strictly enforced, and trade unions were often controlled and suppressed. Minimum wage legislation was mostly absent or ineffective.

Such flexible labour market policies favoured employers, helping to maintain competitiveness in labour-intensive sectors and allowing these sectors to expand and generate jobs. But these policies also resulted in harsh labour conditions and lack of job security for large numbers of workers, at least until the late 1980s. Some commentators have argued that the NIE economic success was dependent on the exploitation and repression of unskilled labour (Deyo, Haggard and Koo 1987). But this seems to be a feature common to most economies in the early years of modern economic growth.

Despite the apparent uniformity of country experience, there was considerable variation in the nature and extent of government involvement in labour markets. In Taiwan and Hong Kong, wages were set mainly by market forces. In Singapore, wage-setting and industrial relations were tightly controlled by government. In South Korea, government provided guidelines on wage growth in an attempt to slow it down and maintain international competitiveness, though not always with great success (Inagami 1998).

By the 1980s, most NIEs had reached full employment, and labour shortages began to become evident. While wages had begun to rise as early as the 1960s, and substantially during the 1970s, labour protection remained lacking until the 1980s. Improvements in labour conditions, strengthening of worker rights, and increasing freedom for union activities started to emerge by the late 1980s, but not as a result of changes in government attitudes. They were the result of tight labour markets which tipped the balance of bargaining power toward workers.

In response to this trend, the policy focus in NIEs switched from dealing with unemployment and underemployment to solving the problem of labour scarcity, especially the shortage of high-skill workers required for the development of a capital-intensive and technology-intensive economy (Inagami 1998). Measures in response to emerging quantitative labour shortages included increases in the labour force participation rate (by mobilizing women and older workers) and encouraging foreign workers. Measures to address skills shortages included enhancing existing educational vocational training programs (heavy public sector support for primary and secondary schooling was an early hallmark of NIE economies) and creating new ones. These human capital investments were critical to the maintenance of rapid growth.

Immigration is another strong feature of NIE labour market experience. The two city-states, Singapore and Hong Kong, have no domestic hinterland and thus have always relied on immigration to increase labour supply. Given the structure of their economies, migration of skilled workers has been a particular priority, though in both cities unskilled migrants are also essential, especially to sectors such as construction and personal services. Singapore has been greatly successful not only in attracting foreign investors, but also in attracting skilled and specialized workers through their active global elite recruiting program, aiming to create an “oasis of talent” in the city-state. Now, the government provides work permits and temporary employment passes for various migrant worker categories. With this ‘use and discard’ principle, the Singaporean government not only restricts the type and number of low-skill workers, but also regulates their wages and ensures their short-term migration status. Since 1989, the state has liberalized immigration rules to attract highly skilled permanent residents, including the setting up of many Singapore Centers around the world as contact points to encourage an inflow of global talent. The state effectively provides many incentives for attracting foreign talent, including fast-track employment pass applications, no restrictions on these immigrants’ dependents, and even subsidized housing (Tai 2006).

Hong Kong’s immigration policy was initially targeted towards population control, and subsequently extended to regulation of labour supply. Until the 1950s, Hong Kong

was quite permissive towards Chinese immigration, offering shelter to refugees from China's political turmoil. Starting in the 1960s, however, Hong Kong adopted tighter immigration controls in response to rising unemployment and poverty. As in Singapore, the state has used immigration restrictions to implement labour market policies. They have liberally admitted expatriates with high and specialized skills. Since 1973 they have regulated the intake of foreign workers in domestic services, construction, and similar occupations. Thus, Hong Kong's foreign workers are distributed at the extremes of the occupational hierarchy – either unskilled labourers, or professional and managerial personnel.

Urbanization

Economic growth and urbanization are highly correlated, and each of the NIEs has had to confront the need for urban planning to accommodate rapid growth in demand for residential and industrial services. Failure to do so meant drastic reductions in potential growth, which in turn posed a threat to social stability and political control. The challenges of urban development in the NIEs have been most profoundly felt in South Korea.

In South Korea, urbanization and industrialization have been strikingly correlated. Urbanization was initially driven by rapid expansion of manufacturing, which drew an inflow of cheap labour from rural areas. The dramatic growth of Seoul is thus largely attributed to the export-led industrialization programs of the Korean government. As the city expanded and manufacturing grew, Seoul functioned as the development engine for the entire national economy (Kwon 2001).

Korea's urban population share has increased dramatically. Currently almost 90% of Koreans live in cities and towns with 20,000 or more inhabitants, up from 39% in 1970³. Seoul, covering only 0.63 per cent of the national territory, is a primate city that accommodates nearly a quarter of the national population.

The government has invested massively in the development of Seoul as a functioning modern city. At the same time, it has taken various approaches to limit the growth of the capital city and later that of the Seoul Capital Region, which is consisted of Seoul, Incheon, a port city about 40 km west, and Kyunggi Province that surrounds Seoul and Incheon. Policies included a selective ban on establishing manufacturing plants, universities and colleges, and corporate headquarters. The government designated "green belts" around Seoul in 1972 and strictly prohibits on land so zoned. Other incentives to discourage businesses from locating their offices in the capital region included differential tax treatments. Some government offices were moved out of Seoul. In 1982, the government passed the Capital Region Management Law, prepared for the implementing the First Capital Region Management Plan for 1984-1996. The First Plan was to divide the Capital Region into five zones and apply different degrees of growth to control to each zone. For example, new construction of buildings with more than 21 stories or floor space exceeding 25,000 meter squared, colleges, universities, and factories employing more than 10

³Since the 1990s Seoul's population has decreased in absolute numbers because of out-migration to five new towns built beyond the city's outer edge. See Kyung-Hwan Kim (2001).

workers were banned within Seoul. The Second Plan for 1997-2011 adopted a little more flexible approach, using a case-by-case assessment. High-tech industries were allowed to locate in the Seoul Capital Region to better cope with global competition, and transport infrastructure projects were implemented to strengthen the Region's potential to serve as an international center (Kim 2001). In sum, the present-day Seoul metropolitan area is the product both of massive physical investments and of comprehensive urban planning.

2.1.2. Southeast Asia (Malaysia, Indonesia, Thailand)

Exploiting natural resource abundance and re-investing in non-farm industries, with mainly elastic labour supplies

Growth and employment strategies and outcomes

At the end of World War II, the SEA countries enjoyed a relative abundance of land and natural resources. Their populations were growing rapidly, however, which resulted in high dependency ratios, and prevailing poverty and underdeveloped educational systems meant extreme scarcity of skilled labour. As a result, extractive industries (mining, forestry) and labour-intensive peasant agriculture and fisheries remained dominant; as late as 1980, primary products accounted for more than 90% of total exports in each country, and except in Malaysia, the first of the group to move toward export orientation, manufacturing jobs made up no more than 10% of total employment.

Following early and generally unsuccessful experiments with import-substituting industrialization, the three SEA economies also turned toward labour-intensive export-oriented growth. By global standards they then began to grow very rapidly-albeit slower than the NIEs, and the period of fast growth began later (Figure 9).

Global development experience warns that resource-dependent economies are highly susceptible to the "natural resource curse", a condition in which exports from extractive industries support a strong exchange rate, undermining growth potential in more dynamic sectors such as manufacturing, and thus in the long run retarding growth of aggregate GDP (Sachs and Warner 2001). Each of the SEA economies has suffered some symptoms of this condition-most especially Indonesia. In international comparisons, however, the SE Asian economies, along with Chile, form a distinct group which, though initially of above-average resource-dependence, have achieved average GDP growth rates substantially higher than the mean for such economies (Coxhead 2007b).

Figure 9: Southeast Asia: Growth of GDP per capita (US\$ 2000)

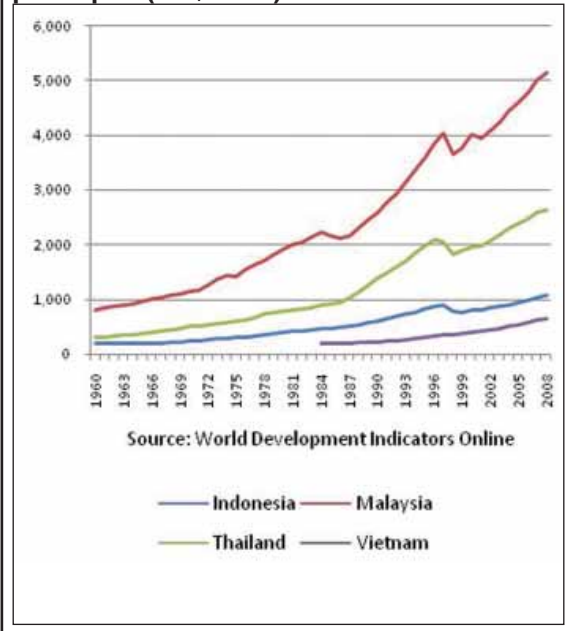
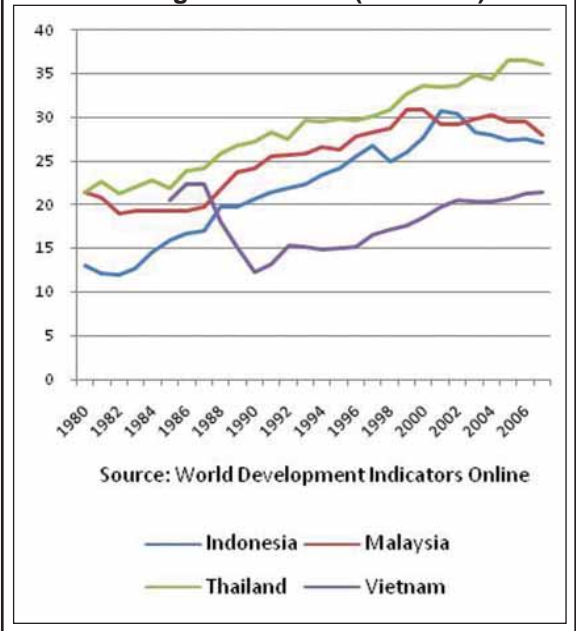
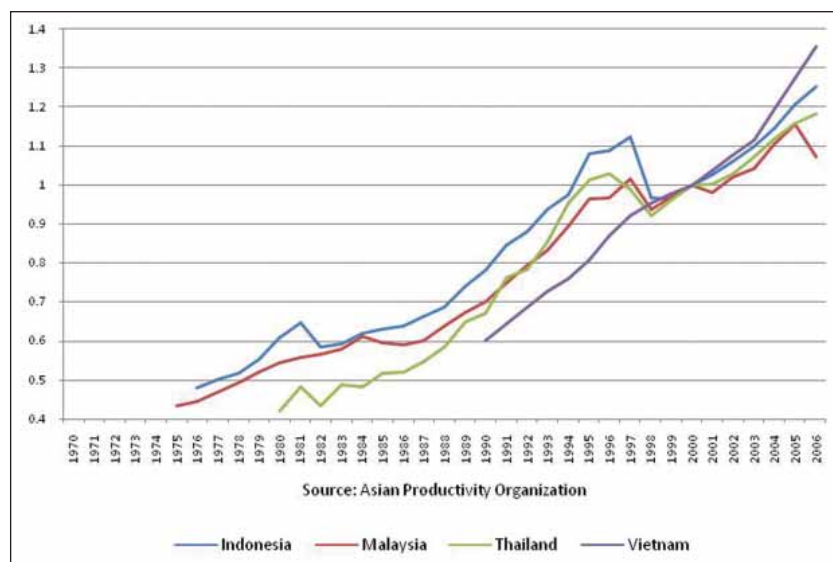


Figure 10: Southeast Asia: Share of Manufacturing Value Added (% of GDP)



The most obvious explanation for this success is the boom in foreign direct investment (FDI) into the region in the years following the 1985 Plaza Accord⁴. Net FDI flows to Thailand, Malaysia and Indonesia jumped from \$US1.1bn in 1985 to more than \$US7.2bn in 1991. This massive investment boom (Bowie and Unger 1997) inaugurated a decade of labour-intensive industrialization. Manufacturing output rose sharply as a share of GDP, and from 1987 GDP growth surged, as did labour productivity

Figure 11: Southeast Asia: Labour Productivity Growth (year 2000 = 1)



⁴The Plaza Accord (September 1985) was an agreement by major central banks to depreciate the US dollar. One consequence was a rise in the Japanese Yen/US Dollar exchange rate, leading to the offshoring of Japan's most labour-intensive (and thus least profitable) industries to lower-wage hosts, primarily in SE Asia.

Not only did these three economies grow very rapidly and in sustained fashion for more than a decade after 1986; they also underwent structural changes that dramatically reduced their reliance on natural resources. By the early 1990s, all three economies exported far more manufactures by value than agricultural and natural resource products.

The FDI-driven transformation of the SEA economies took place 15-20 years after that of the NIEs. As we have seen, this lag was due in part to their relative wealth of land and natural resources, which made it less urgent to pursue an employment-intensive growth strategy. The same resource wealth also helped finance efforts at heavy industrialization behind protective trade barriers, notably (through not exclusively) by state-owned or state-controlled corporations. The global commodity price crash of the early 1980s caused primary export revenues to diminish sharply, and also helped push development policies onto a new track. Indonesia's cushion of hydrocarbon reserves and timber resources wealth helped it to maintain the subsidization of many such industries through the 1990s, at considerable cost to the economy's potential growth—as seen in Figure 9. Vietnam, whose policies and conditions at the time neither favored nor encouraged foreign investment, also missed out on the post-Plaza Accord growth boom. For the big SEA economies, however, employment, productivity, and labour incomes all rose rapidly during 1987-96, while unemployment rates declined or at worst remained stable until the onset of the 1997 crisis.

Direct government intervention in SEA labour markets has been minimal, especially in comparison to South Korea or Singapore. Indirectly, the stress in Malaysia and Thailand on macroeconomic stability and a more or less level playing field for domestic and foreign firms helped create highly favorable conditions for employment-enhancing investments. In these countries private investment, including FDI, has been the primary source of employment creation. The advantage of private-sector led growth and relatively neutral trade and investment policies is emphatically underlined by instances in which these policies were not followed: in Thailand, for example, highly protected industries were often successful at attracting FDI in the 1970s and 1980s, but only for the “tariff-jumping” purpose of capturing a share of the protected domestic market; such investments created very few jobs and contributed nothing to economic growth (Kohpaiboon 2002).

All the countries of SE Asia suffered a major setback to growth during 1997-99. This episode is often referred to as the Asian Financial Crisis, but this label disguises the fact that behind the banking and currency collapses that triggered the crisis lay a deeper problem in the real economy, one with important lessons to today's fast-growing economies. This source of vulnerability to a macroeconomic shock is exemplified by the Thai case. For fifteen years prior to the crisis, Thailand's economy had grown rapidly, driven by FDI and export growth. By the early 1990s, the labour surplus was receding, unemployment was low, and real wage growth was high (Coxhead and Jiraporn 1999). But in the early 1990s productivity growth actually slowed down in Thailand while wage growth remained high, thus eroding the economy's competitiveness. In retrospect, a key reason for this was persistent underinvestment in education and skills. As late as the mid-1990s, high school enrolment rates in Thailand were only about half those in countries with comparable income per capita. The entry of new low-income countries (including

China) to the global marketplace intensified competition for the low-skill manufactures in which Thailand had earlier excelled. Higher labour costs undermined Thailand's position in this market, and a lack of investment in skills meant the country was unprepared to move up the product quality ladder. The outcome was a collapse in earnings from low-skill exports without compensating growth in more skill-intensive areas. Thus, although weaknesses in the financial system provided the trigger for the 1997 crisis, the erosion of export competitiveness has been identified as the real structural cause (Warr 2004). Future economic growth in Thailand and elsewhere in the region now depends on improvements in the productivity of labour, both through human capital investments and through complementary capital deepening (Coxhead and Jayasuriya 2009).

Labour market policies and institutions

The labour market in SEA countries tends to be flexible, as in the NIEs. Some countries have minimum wage policies, but for the most part they tend to be non-binding. Human capital investments in SEA countries were generally not as successful as those in the NIEs. Educational levels in Thailand, Indonesia, or even Singapore⁵ were often below those of South Korea and Taiwan when these countries had similar levels of per capita GDP. For example, looking at Table 1, Taiwan's percentage of employed persons with college degree and above was 5.1% in 1980. This percentage for Thailand in 1995 was 1.1%, Singapore in 1980 was 3.1%, and Indonesia in 1994 was 1.2%, all of which are much lower than Taiwan's level (note that we choose years in which their levels of per capita GDP were comparable). Table 2 similarly shows that South Korea and Taiwan have higher gross secondary enrolment rates and more tertiary students per 100,000 students. There were periods of stagnant or falling enrolments at the secondary and tertiary levels in SEA countries, and these periods tended to coincide with rapid economic growth and rapid growth in the demand for labour. For instance, Thailand's economy grew very fast during the 1980s, yet secondary enrolment rate hardly increased, changing from 28.8% in 1980 to 30.1% in 1990. The tertiary enrolment rate also increased very slowly, from 14.7% in 1980 to 16.7% in 1990.

Table 1: Composition of labour force by education

Country	Year	<=Primary	Jr. Hi	Sr. High	Jr. College & college
Korea	1980	51.5	20.1	21.7	6.7
Korea	1985	37.8	21.1	30.8	10.2
Korea	1990	29.1	19.5	37.7	13.7
Korea	1995	21.4	16.33	43.5	18.8
Taiwan	1967	75.8	11.8	8.4	3.9
Taiwan	1970	73.8	12	10.3	3.8
Taiwan	1975	64.4	15.2	14.2	6
Taiwan	1980	51.3	18.8	19.5	8.4

⁵Singapore is part of the NIE group. However, regarding human development strategy, it is behind other NIEs and is closer to the SEA countries.

Country	Year	<=Primary	Jr. Hi	Sr. High	Jr. College & college
Taiwan	1985	43.4	19.9	24.2	12.5
Taiwan	1990	33.9	19.9	29.9	16.4
Taiwan	1995	26.1	21.1	33.2	20.6
Singapore	1975	66.6	23.9	9.1	
Singapore	1980	58.6	28.9	12.4	
Singapore	1985	54.2	29.2	16.5	
Singapore	1990	49.2	29.9	20.9	
Singapore	1995	36.2	30.4	33.5	
Thailand	1971	95.1	3.3	0.9	
Thailand	1975	93.4	3.3	1.7	
Thailand	1980	91.3	3.8	3.1	
Thailand	1985	87.5	4.9	5.4	
Thailand	1990	83.6	6.1	8.4	
Thailand	1995	78	8.9	11.2	
Indonesia	1976	91.3	4.6	3.5	0.6
Indonesia	1980	88.4	5.1	5.6	0.8
Indonesia	1986	83	7.9	7.8	1.2
Indonesia	1991	76	11	11	2
Indonesia	1994	72.8	11.4	13.2	2.7
Vietnam	1993	49	26	14	1.8
Vietnam	1998	65	23	10	2.5
Vietnam	2002	51	30	16	3.3
Vietnam	2004	46	33	17	4

Source: For Vietnam, data are from VLSS & VHLSS and are for working age population; for other countries, data are from Okunishi (1997) and are for employed population.

Table 2: Educational indicators for fast-growing Asian economies

	Gross secondary enrolment ratio		Tertiary students per 100,000 people		Government education expenditures as % of GDP	
	1980	1996	1980	1996	1980	1995
Singapore	58	72	963	2722	2.8	3
Taiwan	80	96	2035	3160	3.6	5.5
South Korea	78	102	1698	5609	3.7	3.7
Malaysia	48	62	419	971	6	5.2
Thailand	29	57	1284	2096	3.4	4.1
Indonesia	29	48	367	1167	1.7	1.4
China	46	71	166	473	2.5	2.3
Vietnam	42	41	214	404	n.a.	2.7

Source: Booth (2003)

One reason for this poor educational performance was the rapid growth of labour-intensive export-oriented manufacturing industries, which raised the opportunity cost

of staying in school. At the same time, the cost of education was high, for there was a reluctance of the government to use budgetary resources to increase access to education (Booth 2003). Table 2 shows that government expenditures in education as a percentage of GDP are generally lower in Singapore, Thailand, Indonesia, China, and Vietnam than in South Korea, Taiwan, or Malaysia. Thailand was forced into a policy change and increased educational investments in the 1990s only after it became clear that severe skill shortages had emerged. But this experience demonstrates that a determined policy change can make a difference. By 1990 Thailand still had a very low secondary school enrolment rate (30%), but within 10 years this had risen dramatically, to 83%⁶. Similarly, its tertiary enrolment rate doubled from 17% in 1990 to 36% in 2000. While Thailand failed to “educate ahead of demand” as South Korea and Taiwan had, this mistake was recognized by the 1990s and led to substantial increases in human capital investment.

Despite rapid growth in enrolment rates, SEA’s economies have also exhibited unequal and restricted access to education. Enrolments in higher levels of education tend to be much greater for upper income groups (Booth 2003; Khoman 2005). This is probably truer in Thailand and Indonesia than in Malaysia or Singapore, but in all four economies there was clear evidence of skill shortages by the mid-1990s due to the limited expansion in tertiary provision. In Indonesia, for example, enrolment in tertiary education increased rapidly in the 1980s, with much of the expansion coming from private institutions. But the quantity increase seemed to have been at the expense of quality. There has been much criticism of the poor quality of university graduates, especially those from private institutions.

Urbanization

As elsewhere, industrialization in SE Asia has been accompanied by rapid urbanization, and expansion in particular of the capital cities. Although the official statistics show these cities to be of moderate size and that their populations are relatively stable or even shrinking, many studies have pointed out that formal administrative boundaries are increasingly irrelevant to the dynamics of growth of these big cities, their labour markets, and the planning issues they face (Jones et al. 2000; Mamas et al. 2001). Bangkok and its surrounding metropolitan area have a population of 12m, or one-fifth of the Thai population, and the Jakarta metropolitan area (popularly known as Jabodetabek) has 23.3m, or 10% of the Indonesian population, the sixth largest megacity in Asia⁷.

Administrative boundaries between the capital cities and their surrounding metropolitan regions do have relevance in one important way: their presence has greatly complicated planning and investment for orderly growth. In both cities this has led to delays and inefficiencies in provision of vital infrastructure such as roads, housing, utilities, waste disposal, and mass transit systems, with chaotic and costly consequences. Drawdown of water tables has led to water shortages and land

⁶Data are from World Development Indicators Online.

⁷There have been frequent arguments on the definition of urban areas in developing countries and the measurement of urban population and urban labour force remains problematic. Official definitions, and those used in United Nations projections, substantially understate the true population of cities like Bangkok, Jakarta and Ho Chi Minh City. See Jones (2002).

subsidence; Bangkok continues to sink by about 10cm/year, and both Bangkok and Jakarta have regular crises with flooding and saltwater intrusion. Traffic problems have been greatly exacerbated by rapid economic growth, which has led to very fast growth of the stock of private vehicles. Bangkok has belatedly retrofitted elevated highways and a commuter rail system, but Jakarta remains enmired. In the decade to 2008 Jakarta's vehicle stock doubled, while its roads grew by only 10%; one study estimated the costs of delays and fuel consumption due to traffic congestion in that city at \$US3.5bn/year⁸-almost \$US300 per worker. That figure does not include health costs associated with vehicular emissions. Describing Jakarta city as "a major health hazard", one public health professional has estimated that vehicular emissions "are responsible for 70 percent of the nitrogen oxide and particulate matter in the city's air, and that respiratory inflammation accounts for 12.6 percent of deaths in Jakarta, twice that in proportion to the rest of the country⁹."

Rapid land expansion and land use change in and around metropolitan areas with multiple (and frequently chronically underfunded) administrations and inconsistent land-use plans has spawned severe levels of urban sprawl. Land conversion in the fringes of big cities in Indonesia has been described as "out of control" (Firman 1997), due to uncontrolled issuance of permits for land development and speculative land trading. Speculative investment and the rising cost of transport has helped drive inner-city land prices to extraordinary levels, depriving middle-class households of the opportunity to acquire real property and creating a business environment in which rent-seeking and corruption can flourish. In worldwide rankings, the cost of living in Jakarta, for example, is much higher than Indonesia's rankings on per capita income of the Human Development Index. The scarcity of land and the soaring land prices in major cities have also led city governments to undertake land reclamation and development in environmentally sensitive areas such as coastal and estuarine zones, posing significant threats to the environment. These tales of scattershot and inadequate responses to urban growth contrast strongly with those from the NIEs.

2.1.3. China

Late start on globalization; rapid growth driven by trade and investment, rising inequality exacerbated by labour market policies

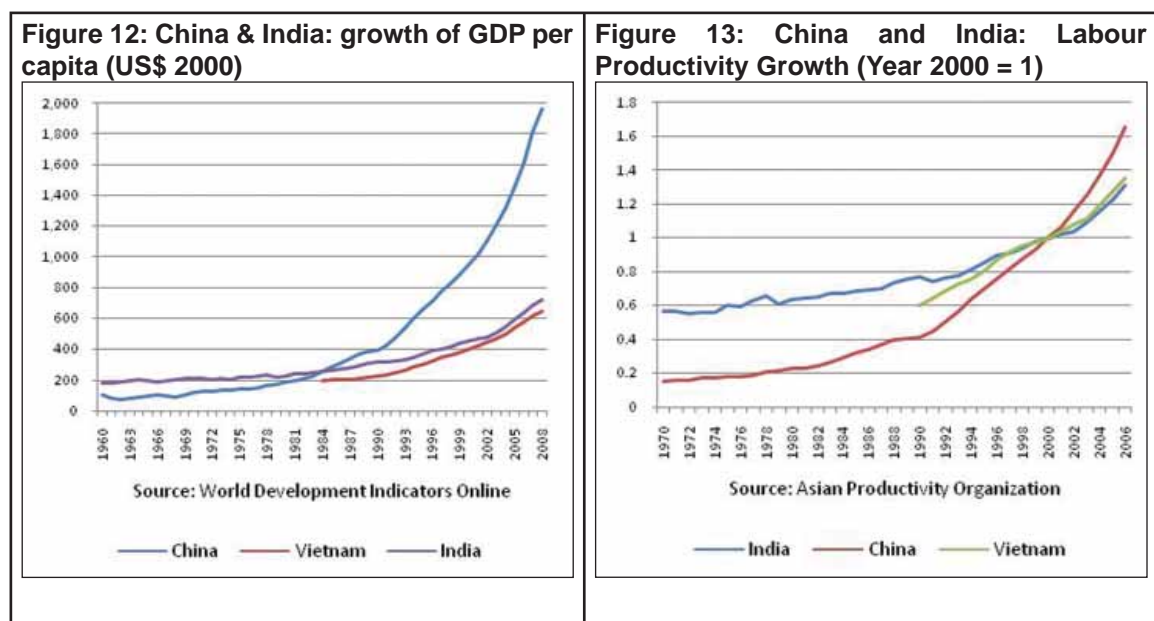
Growth and employment strategies and outcomes

As with Vietnam prior to 1987, the Chinese economy in 1978 was "on the brink of disaster" after decades of low and unstable growth under autarky and central planning. The command economy had emphasized production in heavy industry, neglected and taxed agriculture and light industry, and by overruling market mechanisms and efficiency criteria in resource allocation, had exacerbated low levels of labour productivity and high rates of poverty. Starting in 1978, China undertook a sweeping set of reforms that restored many facets of a market economy and opened the country

⁸ Jason Tedjasukmana, "A Traffic Jam", Time 23 April 2009.

⁹Green Watch: Fuel price hike is not all bad," Jakarta Post, 14 November 2009.

to international trade and investment. These began (as in Vietnam) with agricultural and rural policies, giving farmers individual responsibility and rights to land and encouraging rural enterprises. The subsequent relaxation of state control over many markets and prices helped stimulate a surge of economic growth that has continued unabated for three decades. The bases for this growth have been factor accumulation (including domestic and foreign investment), the transfer of resources like labour to more productive occupations, and more recently, massive investments in education and skills. Although the economic conditions and historical circumstances are very different, it can be said that China has followed the NIEs in pursuit of labour-intensive export-oriented growth. This strategy has paid off in growth of per capita incomes (Figure 11), output per worker (Figure 13), and associated with these, a remarkable rate of poverty decline (Chen and Ravallion, 2008).



China, however, also has a number of unique features relevant to our analysis. One special feature of its growth was the strategy of rural industrialization in Township and Village Enterprises (TVEs). During the transition from a command economy, the TVE initiatives granted considerable autonomy over resource allocation and production to local administrations, and so encouraged non-farm employment growth that absorbed a significant amount of labour in rural areas (40% of new workers during the 1990-98 period). However, the TVEs are best viewed as transitional institutions; since about 1997 employment in TVEs has been declining, due in part to poor management and in part to growing competition from private sector employers. In the past decade, most new employment has been generated in the private sector.

Initially, China's trade liberalization and external orientation was conducive both to output expansion and urban/industrial job growth, but since the mid-1990s this trend has diminished for employment, especially in the manufacturing sector. In the first half of the 1990s, manufacturing employment growth was 2.6%; in the second half, it was -3.9% (Khan 2007b). The gross growth-employment elasticity for China's manufacturing sector was approximately 0.5 in the mid-1980s, declined steadily to

a negative value in 1996, and did not turn positive again (to a low level of 0.25) until 2002. Because of this increasingly employment-unfriendly growth, the structural transformation of employment has been sluggish, certainly much slower than the NIEs, even though for nearly two decades China has been growing faster than the NIEs. Employment in agriculture peaked in China in 1991 and fell by a mere 6% in the next decade. In South Korea, the share of employment in agriculture fell by almost 40% from 1980 to 1991 (Khan 2007a).

Several explanations have been offered for this declining rate of employment growth. China fits the Lewis' model of labour surplus well. Despite rapid growth in manufacturing jobs and rapid rural-urban migration, labour surplus persists in the rural areas. So the goal of creating jobs should always be given first priority. Yet in China, given the level of output growth, productivity increases seem to have taken place at the expense of employment growth, which explains the declining growth-employment elasticity of manufacturing since the mid-1990s. In other words, output growth, although high, has not been sufficient to ensure adequate employment given rapid productivity growth. China needs to find a balance between employment and productivity (we return to this subject in section 2.2). The substantial labour retrenchment of the SOEs as they were subjected to market forces has certainly exacerbated the employment issue.

To aggravate the problem, low agricultural productivity, low skill levels and high barriers to labour mobility make it difficult for rural workers to find non-farm jobs or migrate to urban areas where most of the jobs are. This has created a situation of "migrant labour shortage and rural labour surplus" (Guifu and Hamori 2009). One major barrier to labour mobility is China's internal migration policy. For many decades, the hukou system has posed a major impediment to the movement of labour out of rural areas, contributing to the widening of a rural-urban income gap which, at a ratio of more than 3:1, is among the highest in the world (see below for further discussion of hukou). Although hukou restrictions have been relaxed somewhat, Knight and Yueh (2009) find evidence of continuing labour market segmentation. Urban residents have traditionally been protected against labour market competition from migrants, although competition between the two groups is increasing. There are also various non-price mechanisms (social capital, political capital, ownership of enterprises, etc.) that have risen to prominence in determining labour income (Lu and Jiang 2008). While income disparities caused by differences in human capital can be considered positive to the extent that people have equal opportunities to education, those due to social and political discrepancies might be considered damaging in the long run.

The pace and nature of reform in the labour market also has much to explain the declining employment intensity of output growth in China after the mid-1990s. We now turn to this.

Labour market reform

The recent history of labour market in China has many features in common with Vietnam. Prior to 1978, the Chinese labour market was characterized by direct allocation of jobs and administrative control of wages – as in Vietnam before *doi moi*. The results, in this command economy, included stagnant wages, low productivity and efficiency, labour

redundancy (or disguised unemployment), labour immobility and segmented labour markets. When reform of the centrally planned economic system began in 1978, the labour market was also reformed; market mechanisms were introduced to labour allocation and wage setting, and restrictions on labour mobility were relaxed somewhat. The reform took place at a fast pace and with relative ease in rural areas. This was because there were few losers and little opposition from vested interests (Knight and Song 2005, p. 23). In contrast, reform was much slower in urban labour markets, due to resistance from SOEs and their privileged employees. Urban labour market reforms began in 1980 with the abolition of a state monopoly over labour allocation. They continued in the 1990s with abolition of the planning quota for recruitment by SOEs, after which enterprises were free to choose their own employees. Enterprise reform gained pace in the mid-1980s with decentralization of decision-making within the state sector, but it was not until the mid-1990s that SOEs were finally pushed to face market competition. Their subsequent contraction led to the laying-off of millions of employees.

The Labour Law of 1994 provided the legal framework for China's reform-era labour market. Its provisions include freedom to participate in and organize trade unions, arrangements for the settlement of disputes, promotion of labour exchanges, outlawing of discrimination, introduction of minimum wages, and development of social insurance. Despite passage of this law, however, labour relationships have remained poorly developed, and unionization remains relatively rare (Knight and Song 2005, pp.23-27). The law seems also to have had little impact on labour mobility. Many contract workers continue to be treated as permanent. Unemployment insurance covers only a small proportion of workers. In short, labour market regulations still need much improvement in China, and this is one issue that Vietnam also shares.

The overall result of labour market reform in China has been an increase in efficiency of labour allocation and a rapid rise in productivity. Together with globalization, these reforms have allowed China to take advantage of its low labour costs to develop labour-intensive tradable industries. Yet incomplete removal of impediments to labour mobility have exacerbated segmentation of the labour market, as seen by increasing wage and income disparities, both within urban labour markets and between rural and urban areas.

Labour market reform in the first stage (1978-1996) was characterized by a gradual adjustment of employment and income structure, as the growth rate of production per capita was roughly the same as the growth rate of wages and hence economic growth's benefits were shared more equally among the population (Lu and Jiang 2008). The increase in income inequality during this period was due to the "normal" increase in returns to education as market mechanisms took over administrative control of the labour market. The second stage of reform (1996 onward) has led to "structural differentiation" in which growth rate of real wages has outpaced that of output per capita. Workers who managed to keep jobs enjoyed much higher productivity and wage growth, while the increasing number of workers in the unemployed pool suffered. This led to further inequality, and partly explains the decline in employment intensity since the mid-1990s.

Urbanization

After coming to power in 1949, the Chinese government was obsessed with rapid industrialization. Central planning, rather than the market, determined resource allocation. Pre-reform development policies strongly favored cities and urban residents. As a result, there was an “invisible wall” that reinforced rural-urban segmentation (Chan 1994).

The urban-based industrialization strategy had a large impact on economic structure. During this period, the level of urbanization was low, and urban-rural disparities remained high; in 1978, urban income was 2.5 times that of rural income.¹⁰ Despite fluctuations, the ratio of urban to rural incomes in China has remained high, prompting some commentators to refer to metropolitan areas like Beijing and Tianjin as “European cities surrounded by an African countryside.”

Urban policies during this period were marked by the hukou system, established in the 1950s, which worked as an internal passport arrangement regulating mobility and granting people citizenship in the locality in which, traditionally, their mother was a citizen. Except for government sponsored resettlement programs, permanent changes in residence were rarely allowed during the 1960s and 1970s. Since the 1980s, the decollectivization of agriculture, substantial reforms in the hukou system, and most especially the loosening of migration controls in the 1990s, have resulted in large scale, mostly “temporary” migration. Significant changes in the distribution of urban-rural population, with high rates of urban growth caused by rural-urban migration and the physical transformation of many urban cities have taken place in the last twenty five years, after two decades of limited urbanization and strict control of migration despite high rates of industrialization in the 1960s and 1970s.

However, the relaxation of restrictions on migration in China varies regionally and the hukou system continues to pose a long-term barrier to truly free mobility. Temporary residents in cities have limited access to housing, schooling for their children, health care and other social benefits. There are also interregional differences in culture and spoken language, leading to persistent discrimination against peasants and migrant workers, or the lack of legal rights for migrants and their children, and isolation of migrants in dormitories and urban villages, making assimilation more difficult (Chan et al. 2008).¹¹

The 2005 one-percent national population survey indicates that in November 2005, China’s urban population had reached 562 million, or 43 percent of the national total. The average annual urban growth rate from 1950 to 2000 is 4.1 percent. The reform era since 1978 has shown consistently high rates of urban growth, most of it due to migration, as seen in Table 3.

¹⁰Other measures of real income show that the urban/rural ratio may have been as much as six to one in 1976 (Chan 1994).

¹¹It should be noted, for policy purposes, that the definition of “urban” in China is complex. Urban administrative areas (UAA), which are the official basis for counting urban population, include large areas of farmland and sizable rural populations. This count, therefore, often overestimates the urban population number. At the same time, the hukou registration sometimes treats migrants who have lived and worked in cities for years as outsiders who are excluded from the official statistics. This count, therefore, could underestimate the city population. Furthermore, the rapid urban development in the last two decades has led to frequent urban reclassifications.

Table 3: Components of Urban Growth in China 1950-2000

Period	Average annual urban growth		Average annual change in urban percentage	Natural increase Average annual size		Net in-migration Average annual size	
	Size (millions)	Percentage		Millions	%	Millions	%
1950-1957	5.6	7.2	0.59	2.26	40	3.35	60
1958-1960	10.4	9.1	1.45	1.91	18	8.50	82
1961-1965	-2.6	-2.1	-0.63	2.99	n.a.	-5.62	n.a.
1966-1977	3.0	2.0	-0.04	2.09	69	0.93	31
1978-1982	9.0	4.8	0.66	2.01	22	6.69	78
1983-1990	10.9	4.3	0.66	2.85	26	8.04	74
1991-2000	15.7	4.2	1.00	3.16	20	12.55	80
2001-2005	20.6	4.1	1.35	2.52	12	18.11	88
1950-2000	7.9	4.1	0.50	2.52	33	5.27	67

Source: Chan et al, China's Great Economic Transformation (2008).

The industrial composition of cities also has important implications for urban development policies. As we have seen with South Korea in the 1970s, Indonesia and Thailand in the early 1980s, early industrialization occurs initially in the largest cities, which relative to the hinterland have good public infrastructure and access to international markets. As these largest cities grow and the country develops, standardized manufacturing activity typically leaves the largest cities, moving first to nearby urban regions (the inner and outer zones, the outskirts), or other satellite cities surrounding the metropolitan cities. In the development phase, as national infrastructure improves and development progresses, manufacturers start to move to more rural destinations with even cheaper labour and land costs (e.g. Korea from the early 1980s on). An example is a developed country like the US, the rural sector has a much higher relative share of manufacturing than even small metro areas. This progression is part of what is called “functional specialization.”¹² This is the process where firms decentralize production activities but maintain headquarters and administrative functions in large metro areas for purposes of marketing and outsourcing of business and financial services.

The contemporary development of China's large cities appears to be consistent with functional specialization, but the movement of industries is limited to the peripheral zones of the large cities themselves rather than the hinterland. The manufacturing sector is decentralizing away from urban cores, and governments in some coastal regions have set out policies that encourage this process by supporting the development of industrial parks and infrastructure projects in periurban areas. However, the difference in growth rates between coastal and inland provinces has been as high as three percent during the past two decades (Zhang and Zhang, 2003). Rural incomes are generally highest in the relatively developed east, lower in central provinces, and lowest in the west (Wan and Zhou 2004). Wage growth in Guangdong province has been greater than in other province at every percentile; Zhejiang and Beijing, also

¹²Gilles Duranton and Diego Puga (2004), cited in Chan et al., 2008.

coastal provinces, are ranked second and third. The median growth rate of real wages in Shaanxi, the slowest-growing province, was 3.7%-nearly 6 percentage points lower than Guangdong (Park et al. 2003). It seems that China is now on a dual track, with a prosperous and fast-growing coastal region, and a poor interior growing at a considerably lower rate.

Labour market segmentation, inequality and policy responses

China's development path, with large regional inequalities and a high and rising premium on skills, has generated sharply rising inequality even as overall poverty has diminished. From 1988 to 1995 the Gini coefficient¹⁵ of earnings inequality in China rose by eight percentage points (Knight and Song 2003). This was partly due to occupational wage growth disparities. The mean wage increased by 52 percent, but wage of the 10th percentile rose by only 6% while that of the 90th percentile rose by 75%. Income inequality in urban China has increased significantly since the early 1980s, and especially since the early 1990s (Wang and Shi 2006). In one six-province study, the wages of the median urban worker with at least some college education grew from 1988 to 1999 by 6.3 percent, 1.6 percentage points more than those of the median junior high school graduate; technicians gained more relative to manual workers, and inequality also increased significantly within each occupation group (Parker et al. 2003).

As noted above, continuing restrictions on internal labour mobility are also responsible for rising inequality. By limiting the movement of labour from low-productivity to higher-productivity occupations, these restrictions impose the equivalent of a substantial tax on rural incomes (Zhai and Hertel 2004). The widening gap between coastal and interior provinces has been very prominent in explanations of trends in overall inequality during the open-door era (e.g., Knight et al. 2006), and has generated steadily rising political and economic tensions.

In the early years of the Open Door policies, Township and Village Enterprises (TVEs) helped fill the rural-urban income gap by attracting public and some private investment. But these were essentially transitional institutions, structurally incapable of countering the growth of labour demand from burgeoning manufacturing, construction, and service sector enterprises in cities and coastal provinces. To private investors, the cost-reducing advantages of access to ports, urban infrastructure and the dynamic opportunities created by spatial industry clusters far outweigh the lower labour costs they could capture by moving inland and to rural areas. As a result, and in spite of a "floating population" of over 100 million migrant workers and a continuing large labour surplus in inland provinces, relative wages and incomes in China's coastal regions continue to rise.

The mismatch in China between coast-intensive capital investments and an inland-intensive (and only partially mobile) labour force is also a source of economic inefficiency, and thus a drag on aggregate economic growth. Since 2000, the Chinese government has responded to these tensions with a massive campaign of public-sector infrastructure investment, business subsidies, and income tax breaks directed at inland provinces. This so-called "Go West campaign" is a belated attempt to equalize regional

rates of output and employment growth and thus to close the development gap. Given the country's geography, however, it seems most probable that coastal locations will continue to offer higher returns on trade-oriented private capital investments. From the perspectives of growth, efficiency and equity, state-funded redistributive measures targeting the inland provinces are clearly inferior to labour policy reforms that liberalize and facilitate the movement of workers from inland to coast (Li and Coxhead 2009).

2.1.4. India

Late start on globalization and growth, and delayed labour market transition in poor, densely populated economy

In contrast to the relative success of East and Southeast Asia, India (and other parts in South Asia) went through a long period of slow GDP and employment growth, at least until the late 1980s (Figure 12), India is probably the most typical example of the Lewis labour surplus model: an abundance of labour in rural areas where agricultural productivity is low has kept the labour supply to the modern sector highly elastic and suppressed growth of output per worker (Figure 13). Off-farm employment opportunities in rural areas are limited and non-farm rural industries are starved of capital, while the informal sector in urban areas is among the most visible in the developing world. Until very recently, labour movement from agriculture to manufacturing was sluggish, and real wages were stagnant. A prominent reason was the government's strategy of inward orientation and regulation, which stifled private sector activity and kept savings and investment rates low. Low productivity in the agricultural sector, coupled with low levels of income and human capital, further exacerbated the problem (Manning 1998).

Since the opening of the Indian economy around 1991, GDP growth has improved significantly. But slow employment growth and slow structural change in employment remain serious issues. The main reason is the sectoral pattern of growth. In India (as well as Pakistan), GDP increase has not been driven by manufacturing growth, yet it is manufacturing growth that has the most potential for generating productive jobs (Islam 2009). Within the manufacturing sector, some industries are more labour-intensive than others. Unlike the case of East or Southeast Asian economies where labour-intensive industries were dominant during the early years of growth, India witnessed a gradual decline in the share of labour-intensive industries and a rise in the share of capital-intensive industries.

Even with various trade liberalization measures in the early 1990s, the country has still failed to shift substantively to labour-intensive industrialization. This suggests that trade liberalization alone is not sufficient to get started on employment-friendly industrialization. Other factors that influence the policy environment and hence the pattern of industrialization are also playing important roles. For example, the incentive structure in India is not conducive to employment generation. Various elements in the policy environment in India make capital artificially cheap and encouraged capital deepening as well as the growth of capital-intensive industries (Islam 2009). In addition, the high wage differential between formal and informal sectors and between rural and urban areas suggests the existence of barriers to entry into high-productivity

modern sectors in urban areas. India and other South Asian countries have labour and industrial relations laws which tend to protect workers in the public sector and in large private enterprises. Trade-union movements tend to be more autonomous. These have adverse impact on the flexibility of the labour market and its ability to absorb surplus labour. This is in contrast with the NIEs, where governments facilitated and encouraged sectoral and regional labour mobility. However, Khan (2007b) notes recent improvements in the incentive system: reduced barriers to entry, relaxation of constraints on the private sector, reduction of distortions caused by arbitrary customs and excise duty rates and lowering of these rates.

2.2. Lessons from comparative analysis

In retrospect, the labour-intensive export-oriented growth strategy followed by most East and Southeast Asian countries has delivered sustained economic growth, employment and wage growth, and poverty reduction. Although the NIEs and SEA economies discussed here all pursued similarly export-oriented policies, they vary greatly in their approaches to encouraging new industries and skills development and in the level and nature of government intervention.

The foregoing discussion has necessarily been brief, and there is a great deal more that can be said about the regional development and labour experience. Out of this review, however, we can distil five features of the NIEs and successful SEA economies that allowed them to grow fast while keeping inequality low.

(i) Successful economies initially concentrated on labour-intensive, export-oriented industries, which ensured rapid employment growth and maintained a balance between employment growth and productivity growth.

The (inevitable) exceptions to this statement are (1) natural resource sectors in Southeast Asia, where capital-intensive mining, forestry and oil/gas industries have made important contributions to growth, and (2) South Korea, where an authoritarian government's complete control over the capital market and high protective barriers for industry made a heavy industrialization strategy feasible in the 1960s and 1970s. However, the conditions that made Korea's strategy feasible no longer exist for any country. In general, the NIEs achieved rapid output and employment growth through labour-intensive industries while relying on skills acquisition to ensure productivity growth in the longer run, thus finding a balance between employment growth and productivity growth (Islam 2009). China and India (and Vietnam too) have been growing at very high rates, yet labour demand growth has barely matched growth of supply. So factors other than output growth must be at play in constraining employment in these countries. The discussion so far has identified three such factors: an emphasis on capital-intensity at early stage of development when labour excess is severe; an incentive structure unfavourable to labour-intensive industries; and the failure to promote labour mobility. These policy mistakes made by China and India provide important lessons to Vietnam.

(ii) The supply of educated and skilled labour kept pace with or was even ahead of labour demand, avoiding growth slowdowns and rising wage inequalities

In parallel to substantial wage increases across the board, wage differentials by occupation, educational level, sex or age decreased significantly in the NIEs, in particular South Korea and Taiwan (Okunishi 1997). This is due to the success of NIEs' human resource development and vocational and educational training programs, which achieved two goals. First, these programs increased the supply of skilled workers, avoiding the rising wage inequality due to scarcity of skilled workers. Second, these programs upgraded the skills of blue-collar production workers, increasing their productivity relative to white-collar workers. Okunishi (1997) explains that as the NIEs become more dependent on quality products rather than cheap products, the improvements in productivity of blue-collar workers helped narrow the wage differential.

(iii) Labour market policies encouraged regional and sectoral labour mobility and maintained labour market flexibility

- a. absence of policies protecting only a small proportion of modern sector workers
- b. minimal restrictions on internal migration

A large proportion of the poor population in every country lives in remote areas, away from the center of growth. In order for them to share the benefits of growth, they should be allowed to move freely to growing regions and to enter expanding sectors. The NIEs tended to have flexible labour markets; as a result, such regional and sectoral mobility was high, and they transited quickly and smoothly through the Lewis turning point. China and India have various barriers to labour mobility; as a result, they are having difficulties with the absorption of surplus labour and are experiencing rising inequality.

(iv) A balance between enterprises of different sizes and of different labour productivity levels.

Leaving the economy to market forces alone, smaller enterprises might not be able to grow fast. An unequal distribution of earnings usually springs from the fact that a small proportion of workers are concentrated in a few large enterprises having very high labour productivity and hence high wages, while the rest of the workers are in a large number of small enterprises having very low labour productivity and hence low wages (Richards 2001). Taiwan and Hong Kong are examples of even distribution of firm size and labour productivity: the difference in labour productivity and hence wages between large and small firms is only in the order of 2:1. India on the other hand is often known for having a "missing middle"; that is, the employment distribution is divided into two segmented sub-distributions: an exceptionally large proportion of low-productivity employment are in firms of size six to nine workers, and a reasonably high proportion of high-productivity employment are in firms of size over 500 workers. There are very few medium-size firms, and the productivity differential ratio between large and small firms in India is in the order of 8:1.

South Korea is well-known for its support of very large enterprises or conglomerates, which might have been critical in developing new products, entering new markets, and capturing export shares. But this policy began to reverse in the 1980s when the need for entering and capturing new markets and developing new products was less urgent than the need for maintaining competitiveness: large firms ran into problems of high labour and management costs, so smaller enterprises had to be brought in. The inequality index of South Korea peaked in the late 1970s when the country was favouring large firms, but then dropped significantly as the country reversed this policy (Richards 2001).

(v) Adequate investment in the infrastructure of urban areas, allowing the urban sector to grow and absorb labour surplus from the rural sector

In the absence of highly discriminatory government policies, industries (other than those dependent on a fixed resource, such as a mineral deposit) earn higher profits by locating close to each other, to providers of services such as banking and finance, and to ports and other key infrastructure. Cities allow firms to capture such scale economies. Underinvestment in urban development raises industry costs and imposes other burdens on growth, and also generates potential for economic and social conflict. In short, promoting industrialization necessitates support for urban growth. This places a responsibility on the state to ensure that cities can grow in an orderly and efficient manner. This is not to suggest that rural-based development is not important, but rather that there are preconditions for economically efficient rural industrialization to take place without large subsidies. The dispersal of U.S. manufacturing (other than processing of agricultural and resource products) away from large cities did not begin in earnest until after the construction of the interstate highway system. This, together with a thick network of railroads, canals, and air links, reduced transport and communications costs sufficiently to make relocation profitable.

The strategy of openness and export-oriented growth is not free of controversy; nor is it a palliative for all social ills. Three lessons emerge quite clearly from our review of regional experience. First, income inequality shows contrasting trends both across countries and over time within countries; there is no development strategy that can guarantee both continued growth and diminished inequality. The more important point is that rapid growth certainly reduces poverty, even if inequality rises at the same time. Second, sustaining growth in a globalized economy requires more than simply 'hands-off' policies. The NIEs and Southeast Asian economies achieved success in part by stabilizing their macro-economies and liberalizing their trade regimes comparatively early. Financial liberalization, however, came later and less evenly. Mismanagement of financial liberalization, especially in Thailand and Indonesia, was a trigger for the Asian crisis in 1997-98. As with education, government must be active in financial markets both as regulator and facilitator of growth. Third, the Asian Crisis also revealed weaknesses in 'flexible' (that is, *laissez-faire*) social insurance policies, which increased vulnerability among workers and their dependents when the economy went into recession (Richards 2001). More attention to social safety nets could have helped alleviate the social consequences of the crisis.

2.3. Contemporary regional and global trends

We now turn to current trends in the global and regional economy. The world economy has become more closely interknit, thanks to lower trade barriers and transport costs and the opening of large developing economies like China, India and Brazil to international trade and capital flows. There is no doubt that over the past two decades this trend has raised aggregate world welfare, but the distribution of gains both across countries and within them, while still imperfectly understood, is inherently unequal. For this reason among others, the economic implications of “globalization” are still hotly contested.

The diversity of outcomes arises for many reasons. One important reason, however, is that recent global growth has had more than one facet. It includes ongoing commodity price booms, intensified competition in global markets for labour-intensive manufactures, and increased international demand for skill-intensive intermediate goods (or “fragmentation trade”). In any individual economy these three phenomena can easily have contradictory effects, depending on its structure, the nature of the global market change, and much more besides. In the short run, global shocks are felt through real exchange rate adjustment and inter-sectoral competition in domestic factor markets. In the long run they appear also through dynamic gains or losses associated with the expansion or contraction of skill-intensive sectors and the depletion or exhaustion of natural resource stocks.

Understanding and quantifying these phenomena is a precondition for forming judgments about the global distribution of gains from integration, and the design of national development policy. The integrated world economy has become much more complex, however, and our tools for understanding it have failed to keep pace (as was clearly evident during the 2008-09 global economic crisis). In this section we restrict ourselves to an enumeration, with little comment, on some of global trends of particular importance to our subject. The most important of these is the rise of “Chindia” (China and India) as global suppliers and demands of goods, services and capital.

2.3.1. *The rise of “Chindia”*¹³

The emergence of China and India as major economic powers, forcing other countries to “dance with the giants” (Winters and Yusuf, 2007) has already led to major changes in trade and investment patterns in Asia. In many ways, this sea-change in international economic organisation has highlighted complementarities, rather than competition, among economies. When China first began to attract large-scale foreign investment and expand its export-oriented labour-intensive manufacturing industries, the fear that it would become a major threat to the continuing economic growth of developing Asian economies was widespread. It is now clear, however, that for some Asian economies China’s growth boom has generated a new dynamic, reflected in a pronounced acceleration in intra-Asian trade and regional economic integration (Athukorala, 2009). India’s rapid growth and opening to trade indicates an impending

¹³ This section draws upon Coxhead and Jayasuriya (2009).

second round. Indeed, in the recent global recession, the resilience and growth of these two economies acquired even more prominence as a positive influence.

The most obvious feature of Chindia's rise is the addition, through their integration in the global market, of several hundreds of millions of unskilled workers to the global labour supply. As may be expected, this enormous shift has raised the productivity of (and returns to) global stocks of all other productive factors- capital and human capital in particular. Two decades of historically unprecedented corporate profits worldwide, prior to the 2008 global financial crisis, speak to the extent of this effect. For labour-abundant countries, however, this change has of course been less positive. Global competition in the markets for labour-intensive products has never been more intense, nor profit margins in this industry thinner. These are fundamentally different conditions to those faced by the earlier Asian globalizers, even as recently as the early 1990s. The implication is clear: whereas Taiwan, Korea and Thailand each enjoyed over a decade of dominance in world markets for products like garments and footwear, the transitional contribution of such exports to economic growth in countries like Vietnam may be very brief indeed-depending on global economic conditions and economic and policy innovations in other low-income countries. This places a very high premium on efforts to ensure that the economy is prepared to weather the loss of such industries without a 'sudden stop', as experienced by Thailand and Indonesia in the late 1990s.

2.3.2. Implications of Chindia for trade and employment

The majority of developing Asian economies have been drawn into the China-centered international production network, resulting in some cases in major changes in production structure and the volume and direction of their international trade (Lall and Albaladejo, 2004; Coxhead, 2007).

This reorientation toward China has had three big types of sectoral impact. First, just as in rich countries, the producers of labour-intensive manufactures have encountered intense competitive pressures. Second, natural resource export industries have enjoyed a sustained commodity price boom (recent fluctuations notwithstanding). Third, manufacturers of skill-intensive goods such as components for computers, phones, and other electronic devices have found opportunities to expand through participation in so-called "fragmentation trade" (i.e. trade in partly finished manufactures) with China.

The first impact is obvious. Producers of garments, footwear, furniture, low-end electrical appliances and similar low-tech products everywhere, whether in Raleigh or Rawalpindi, are locked in competition with Chinese factories operating on razor-thin margins. The end of the Multi-Fiber Arrangement, under which the USA and the EU imposed "voluntary" quotas on garment exports from developing countries, removed a big barrier to China's growth in this product category, thereby intensifying competitive pressures on producers (and by extension, workers) in other countries. The overall expansion of Sino-American and Sino-European trade has also conferred advantages on Chinese producers by creating and enhancing trade networks and other forms of market infrastructure. Some of this growth has come at the expense of firms elsewhere in the developing world.

The second impact, on global markets for natural resources, is also pretty clear, but the numbers are big enough to merit review. China is now the world's largest consumer of most of the main metals (accounting for a quarter or more of world imports), and a major consumer of energy. It is the largest world consumer of many agricultural products (including wheat, rice, palm oil, cotton and rubber), and the second largest in others (soybeans, soybean oil, tea). Between 1990 and 2003, Chinese demand for major metals grew at an average of 14.7 per cent yearly; since 1999, it has grown at over 17 per cent and absorbed around two thirds of incremental global output. For any country that is specialized in primary commodity exports, China is a major destination and the driver of a sustained export boom. Vietnam's resource exports to China – notably though not exclusively coal – have boomed along with those from other countries. This has helped support the Vietnamese currency in global markets and thus has imposed a penalty, however slight, on other tradable sectors.

The third impact is more subtle. As global trade and transport costs have fallen, firms have been quick to abandon the old manufacturing model, in which all (or nearly all) stages of production take place within the borders of a single country. Increasingly, parts and components, especially of electrical and electronic products, are manufactured in specialized plants located wherever economic logic or business expediency dictates, then shipped to China (or another low labour cost location) for final assembly and packaging. The more advanced Asian economies (Korea, Japan, Taiwan) are leaders in this trade, but even such latecomers to industrialization as Malaysia and Thailand have developed significant exports of skill-intensive electronics parts and components to assembly plants in China. The more China's factories grow, the more they draw in imports from locations such as these. As long as China's economy continues to expand, and so long as it maintains its preeminent position as the preferred location for labour-intensive assembly operations, countries that can occupy specialized, skill-intensive niches in the parts and components trade will be beneficiaries.

2.3.3. Coping with global stress: lessons from Indonesia?

If labour-intensive exports are 'footloose' and resource exports are volatile, then what are the conditions for a globalized economy to succeed, or at least to secure a toehold, in the most rapidly expanding segment of Asian (and global) trade, parts and components? Clearly labour force skills and mobility are essential to the health of an industry where production processes are highly specialized and technology can change with great rapidity. However, there are other factors also at work.

We have noted above that one Asian economy with which Vietnam is directly and contemporaneously comparable, in terms of the broad HDI measure of economic welfare, is Indonesia. Indonesia and Vietnam are similar in other ways, too: each is a labour-abundant, low-income country with a relatively low-skilled labour force, substantial natural resource wealth both in oil and gas and in agricultural lands suitable for export-oriented plantation agriculture, and a large export-oriented labour-intensive manufacturing sector. Each has achieved considerable success in economic growth, but both have far to go to convincingly escape poverty and enjoy sustained increases

in labour productivity and wages. Indonesia may offer a cautionary tale to Vietnam concerning the global market for parts and components: unlike its close neighbours Thailand and Malaysia, it has failed to break into that market, and risks long-term exclusion from it.

Among Asian developing economies, Indonesia has lagged in terms of investments associated with productivity growth and progress up the technological ladder. Its policies toward FDI have reflected considerable ambivalence over development strategy, initially encouraging FDI only in state-dominated sectors such as energy, mining, and import-substituting manufactures. Liberalisation of trade and investment policies in the 1980s and early 1990s was significant, but throughout the reform era (the 1990s) the criteria for investment policy reform seemed to be derived at least as much from a domestic political agenda as from the search for economic efficiency and growth. Perhaps as a result, Indonesia's record of total factor productivity growth in the critical years 1975-95 was respectable in an absolute sense, but not relative to regional trade partners and competitors: "Indonesian manufacturing is steadily climbing the technology ladder. However, global levels of TFP have also improved over the past decades. Hence, when viewed from an international perspective, Indonesia's ascent resembles a standstill on the global escalator" (Timmer 1999: 93).

Relatively low TFP growth can also be understood in the context of Indonesia's transformation, during this period, from an extremely poor, rural and agrarian economy into the ranks of the lower middle income countries, a tremendous (and tremendously rapid) transformation based initially on exploitation of its abundant endowments of natural resources, and increasingly after the mid-1980s, on unskilled labour in export-oriented manufacturing.

Indonesia shares with most other middle-income economies a declining growth rate of skill-intensive exports in relation to total exports (China is the exception). During the 1990s, Indonesia's exports of goods classified as 'high-tech' in the World Development Indicators rose from negligible values to just above 16% of manufacturing exports—and most of this was in reality the labour-intensive assembly of integrated circuits and consumer electronics. This share has since fallen sharply. More worrying still, Indonesia's contribution to global exports of labour-intensive manufactures, and the contribution of these products to its own employment and export earnings, has also diminished since 2000 (Coxhead and Li 2008). The country now faces the threat of a loss of its 'low-end' manufactures to lower-cost competitors such as Bangladesh, without the chance to move up to 'high-end' exports of the type that have been successful in Thailand and Malaysia. This poses a serious threat to employment growth, aggregate growth, industrial transformation, labour productivity growth, and domestic returns to skills. Faced with these prospects, the best-trained Indonesians could easily decide to relocate internationally rather than face low and uncertain returns domestically, leading to a brain drain and reduced social returns on public investments in education. In spite of some important differences between Vietnam and Indonesia, we believe that the similarities are sufficiently strong that Vietnamese policy makers could look to that country for lessons on ways in which the global economy has buffeted, and perhaps damaged, prospects for growth in a small, low-income, skill-scarce, labour-abundant economy.

3. VIETNAM'S EXPERIENCE AND COMPARISON WITH NEIGHBOURING COUNTRIES

In this section we assess Vietnam's labour market experience against its own historical experience and those of its regional neighbours. Since doi moi, Vietnam's labour markets have evolved rapidly, along with the economy as a whole. The rapid transition away from the non-market economy of the pre-doi moi years has been responsible for a high rate of new job growth, although whether that rate has been or will be high enough to absorb all new entrants to the labour force remains in doubt. Inequality of aggregate income and expenditure have remained relatively low-though clearly some groups are less mobile across occupations and space, and are being left behind. There has been a big improvement in average skills-but doubts persist as to the quality of the match between demand and supply for skills, especially as the structure of the economy has changed so quickly. Growth of output per worker has been impressively high-but there is still a long way to go before Vietnam can catch up with other countries in the region, and there is as yet little evidence of intersectoral convergence of labour productivity levels, as seen in the NIEs.

3.1. Economic growth, structural change, poverty and inequality

Starting from a very low per capita income level, Vietnam has grown rapidly since 1990. Its economic growth rate since then is second only to China. Poverty has fallen very sharply (Table 4), and again, Vietnam's performance on this important indicator of human welfare is second only to that of China. Despite impressive achievements on these fundamental objectives, however, Vietnam remains poorer, and its workers less productive, than other large economies in the region.

Until recently, inequality (based on per capita expenditure data up to the year 2002 or 2004) was increasing in Vietnam. But a most recent study by McCaig et al (2009), using both income and expenditure data updated to the year 2006, offers contrasting pictures. Table 4 shows that, on the one hand, the Gini coefficient¹⁵ of per capita expenditure started out relatively low in 1993, increased from 1993 through 2002, but has stabilized or slightly decreased since then, and so has the rural-urban expenditure gap. On the other hand, the Gini coefficient of per capita income started out high by international standards, decreased substantially from 1993 to 2002, and stabilized since then. But these numbers are based on the five rounds of the VHLSS. Given the questionable representativeness of the living standard surveys, a more cautious conclusion is that we cannot say conclusively that aggregate inequality has either risen or fallen.

¹⁵The Gini coefficient is a measure of income disparity in a population and ranges from 0 (perfect equality; all individuals are equally well off) to 1 (perfect inequality; one individual has all the wealth).

Despite the contrasting evidence and the data quality concern, two conclusions can be drawn. First, the current Gini coefficient in Vietnam, whether it's 0.35 based on expenditure data or 0.38 based on income data, is relatively low by international and regional standards (the Gini coefficients are 0.37 for India, 0.39 for Indonesia, 0.42 for Thailand, 0.47 for China, and 0.49 for Malaysia). Second, while overall inequality stays low and might even be improving over time, there remain large gaps across region and ethnic groups in terms of poverty reduction. It is widely recognized that ethnic minorities have not shared equally in the benefits of growth. Between 1993 and 2004, poverty rate for ethnic minorities fell only from 86% to 61%, while that for Kinh and Chinese fell from 54% to 14% (Swinkels and Turk 2006). A study by the Vietnamese Academy of Social Sciences found considerable disparities in regional poverty reduction rates (VASS 2006). The Northern Mountains, North-Central Coast, and Central Highlands regions all have poverty incidence above 30% of population, and these three regions account for 57% of the country's total poor population.

Table 4: Vietnam: poverty and inequality indicators

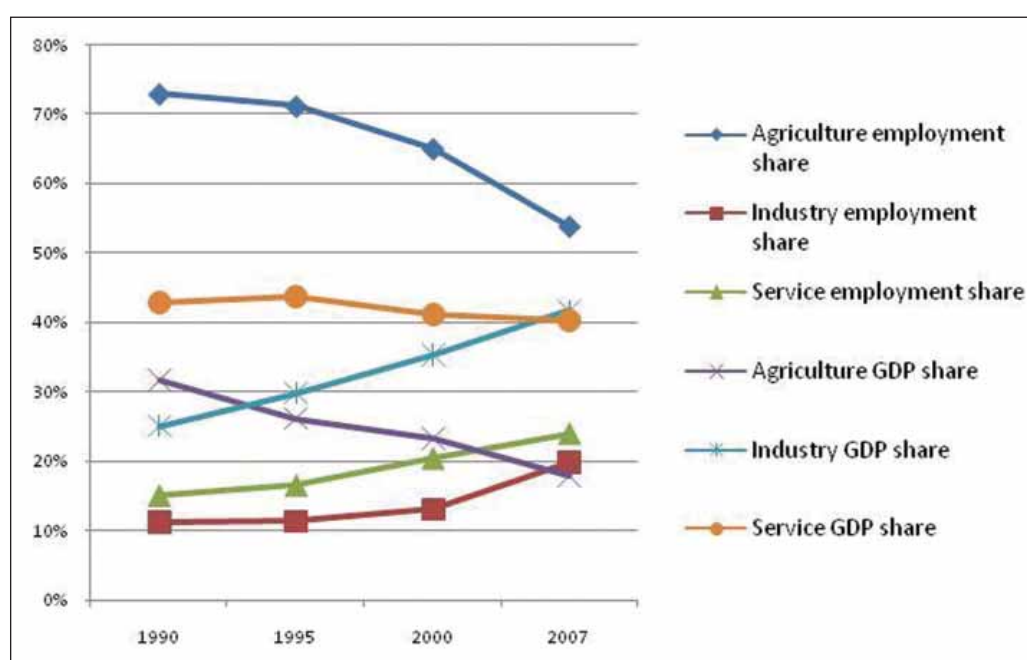
	1993	1998	2002	2004	2006
Per capita expenditure					
Overall Gini	0.33	0.34	0.37	0.37	0.35
Urban-rural ratio	1.97	2.22	2.36	2.24	2.01
Per capita income					
Overall Gini	0.45	0.43	0.38	0.39	0.38
Urban-rural ratio	2.01	1.97	1.89	1.86	1.75
Poverty headcount ratio based on income (percent of households with income less than \$PPP1/day)					
Whole country	0.65	0.35	0.02	0.1	0.07
Rural	0.71	0.41	0.21	0.13	0.08
Urban	0.4	0.16	0.04	0.02	0.01

Source: Computed from VHLSS data by McCaig, Benjamin, and Brandt (2009).

McCaig et al 2009 suggests several reasons for the (possibly) improving income distribution in Vietnam. One is the reduced importance of non-farm household businesses incomes, which tend to be unequalizing and was a main source of inequality in the 1990s. The other reason has much to do with the labour market. Rural income growth was especially rapid, outstripping urban income growth overall. This is thanks to rising wage employment opportunities for rural workers, which tend to have equalizing effects because of the reduction in education inequality, as will be shown in the section on labour supply below. Such empirical evidence indicates that the labour market might have worked better in the 2000s than in the 1990s. We will return to this issue later in the section on Vietnam's labour market performance.

The country's strong macroeconomic performance masks some areas of concern. Figure 14 shows that growth in employment and changes in employment structure are not keeping pace with changes in the structure of production. As expected, agriculture's share in employment (dark blue line) is much higher than its share in GDP (purple line), and industry's employment share (red line) is much lower than its GDP share (light blue line). These differences reflect the higher capital-intensity of industrial production. But the figure also reveals that Vietnam's employment structure is transiting much slower than the structure of output.

Figure 14: GDP and employment structure



Source: Authors' calculation using data from Statistical Year Books, various years

Table 5 compares production and employment structure of Vietnam in 2000 with other SEA economies in 1985 and China in 1995 (see the Preface and Appendix 1 for explanation of choice of comparison years). The table shows that where employment structure is concerned, Vietnam in 2000 was on par with Thailand but was falling behind Indonesia, China, and especially Malaysia.

Table 5: Production and employment structure (%)

	Vietnam (2000)	Thailand (1985)	Malaysia (1985)	Indonesia (1985)	China (1995)
Agriculture's production share	23.3	14.2	n.a.	21.9	19.19
Manufacturing's production share	35.4	23.4	n.a.	19.1	39.5
Agriculture's employment share	65.3	68.4	30.4	54.7	48.5
Manufacturing's employment share	12.4	12.1	23.8	13.4	21

3.2. Labour market performance

Employment and unemployment

From 1990 through 2007, the average annual employment growth rate was 2.42%, just 0.1% above the average annual growth rate of the labour force (2.3%). This might explain the low official unemployment rate. But it would be too hasty to conclude that employment generation has been sufficient to accommodate all new entrants to the labour force. A low official unemployment rate is typical in low-income countries, where many workers are self-employed or in the informal sector.¹⁶ The real issues are underemployment and the distribution of unemployment by worker types. Unemployment is concentrated among young workers: in 2008, the unemployment rate among workers aged under 30 was 9.3%, against only 3.4% for workers aged 30-39, 2.1% for those 40-49, and 1.8% for those over 50 (CIEM 2009). However, even the underemployment rate seems to have diminished in 2006-07; these were boom years for the Vietnamese economy.

Table 6: Vietnam's employment growth

	1991	1995	2000	2005	2006	2007
Employment (m)	30.1	33	37.6	42.5	43.3	44.2
		1991-95	1996-00	2001-05	2006	2007
Employment growth (ann. ave %)		2.35	2.63	2.49	1.9	1.9
Unemployment (%)			2.34	2.28	n.a.	2.2
Urban			6.18	5.46	n.a.	4.4
Rural			1.28	1.26	n.a.	1.4
Underemployment (%)			11.96	11.44	n.a.	4.9
Urban			8.44	6.98	n.a.	2.1
Rural			12.96	12.82	n.a.	5.8

Source: authors' calculation using LFS data from MOLISA 2006.

Note: Unemployment rate = percentage of workers not employed in the past 7 days and looking for work

Note: Under-employment rate = percentage of workers who would like to work more hours, or work less than 8 hours per day, are able to work more.

Employment intensity of growth

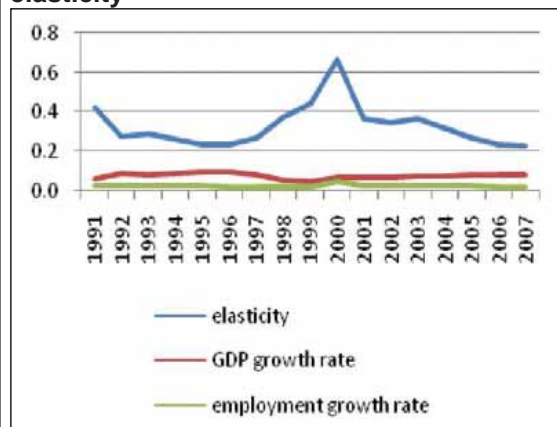
An indicator of the employment intensity of growth is the growth-employment elasticity, which is the ratio of employment growth rate divided by the GDP growth rate. Figure 15 shows values of this elasticity for Vietnam. The annual average is 0.33 during 1990-2007, which is quite low when compared with neighboring countries. According to Khan (2007b), this elasticity is 0.7 for Indonesia (1975-1996), 0.46-0.55 for Malaysia

¹⁶The data in the table seem to indicate that that unemployment is more prevalent in urban than in rural areas. However, rural workers are more likely to be self-employed or in the informal economy; hence underemployment rather than unemployment is more common in rural areas.

(1970-2004), and 0.47 for Thailand in the 1980s (though it is significant that Thailand's elasticity fell to only 0.07 in the pre-crisis period 1990-1996, then rose again 0.38 in 2001-2004). Figure 15 shows that there was a brief period 1998-2001 during which the elasticity rose sharply. Because employment growth stayed very stable throughout the period, this spike is due to the slowdown in GDP growth in the aftermath of the Asian crisis.

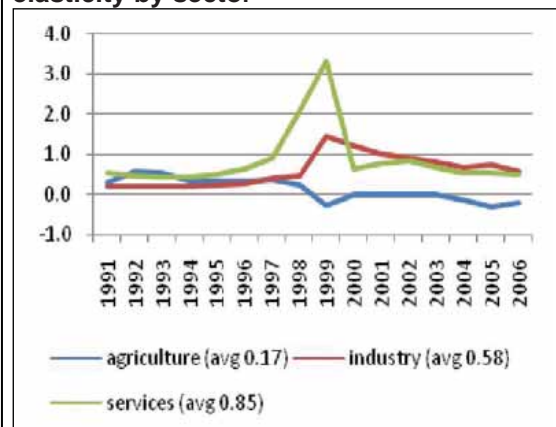
Employment growth in agriculture has been low: on average each 1% rise in output has generated only a 0.17% increase in jobs (Figure 16), and since the burst of early doi moi agricultural growth in the 1990s, the elasticity has been zero or negative, meaning that agriculture is rapidly becoming less labour-intensive. Table 7 shows that in 2000-08, while 7.5 million jobs have been created overall, agriculture's contribution has been negative (-0.6 m jobs, -8% of total job creation). As the labour force continues to expand, other sectors must absorb not only new entrants to the workforce but also those moving out of agriculture. In the early years of doi moi, the growth-employment elasticity of industry was well under 0.5; industry was dominated by capital-intensive state-owned enterprises (SOEs) and their growth added few jobs. After 2001, the changing structure of industry toward more labour-intensive activities is reflected in an elasticity consistently greater than 0.5. Even this does not seem high enough, however, as industry has added only 2.8m new jobs (38.5% of the total) since 2000, and its share in total employment has risen only to 20%. Services, with a higher employment share, have accounted for more than 68% of new job creation.

Figure 15: Vietnam's growth-employment elasticity



Source: Authors' calculation using data from Statistical Year Books, various years

Figure 16: Vietnam's growth-employment elasticity by sector



Source: Authors' calculation using data from Statistical Year Books, various years

This sectoral trend has two implications. On one hand, the service sector, dominated by the private sector, is generating most new employment. Thus, this sector deserves more attention and support from the government. On the other hand, the expansion of service sector jobs is a source of concern, since these tend to have low productivity,¹⁷

¹⁷In many industrial economies, service sector tend to have high labour productivity and wages because most of the jobs are high technology and high skilled—such as financial services. This is different from services in a developing country like Vietnam, where a significant proportion of service sector jobs are self-employed street vendors, etc. Also, please read discussion below on labour productivity.

low wages, and job insecurity. The goal of development is not to have people move from one sector marked by low labour productivity (agriculture) to another (services). At this point in Vietnam's development, manufacturing should still take the primary role of absorbing labour from agriculture.

Table 7: Vietnam's employment growth by sector 2000-08

	# of workers	Share in employment	Net new jobs since 2000	Contribution to employment growth
	2008 (million)	2008 (percent)	million	percent
Employment	44.9	100	7.3	100
Agriculture	23.6	52.6	-0.6	-8.219
Manufacturing	6.3	14	2.8	38.356
Mining	0.4	0.9	0.1	1.37
Services	14.6	32.5	5	68.493
(Memo: Labour force)	-46		-7.5	
Rural	12.96	12.82	n.a.	5.8

Source: ADB

Labour supply

Labour supply is measured by the total number of workers, but also by the numbers of those at each skill level. There is no doubt that Vietnam has an abundant and growing labour force: each year, more than one million new workers enter the labour market, so the pressure to create new jobs is high (see Table 8). Table 9 shows that Vietnam's overall labour force participation rate (71% in 2006) is normal by international standards.¹⁸ This rate has been decreasing over the years, consistent with rising incomes. But women's participation rate is very high, especially in the rural areas. Vietnam's female labour force participation rate is 58% in urban areas and 70% in rural areas in 2006, compared to 50% in Indonesia, 68.9% in Thailand, 48.3% in Taiwan, or 48.1% in South Korea in 1995 (see Okunishi 1997 for data).

The average skill level is low, albeit slowly increasing. Table 1 in section 2 places this in regional context, showing the composition of working age population by educational attainment. Nearly half the Vietnamese labour force is unskilled (primary school degree or no degree at all). From 1993 to 2006, the proportion of unskilled workers decreased by only 5%, to 44%. Most of this decrease was matched by an increase in semi-skilled workers (lower or upper secondary school degrees). The proportion of high-skilled workers (junior college degree and above) increased from 1.8% in 1993 to 4.2% 2006—a figure that is still very low by comparison with other countries in the region (see below).

¹⁸ Table 3 in Okunishi (1997) shows that labour force participation rate tends to be between 70% and 80% for many other Asian countries.

Table 8: Vietnam's large and increasing labour force

	1996	2007	Avg. 1996-2007 annual growth rate
Population aged 15 and above			
Total	47,620,139	63,305,882	3.0%
Urban	11,026,793	17,964,868	5.7%
Rural	36,593,346	45,341,014	2.2%
Male	22,391,531	30,424,965	3.3%
Female	25,228,608	32,880,917	2.8%
Labor force			
Total	36,082,273	47,144,091	2.8%
Urban	7,243,053	11,895,757	5.8%
Rural	28,839,219	35,248,334	2.0%

Source: Author's calculation using Labor Force Survey data

Note: Labor force includes employed and unemployed workers

Table 9: Vietnam's decreasing labour force participation rate (%)

	1996	2000	2005
Nation	75.77	72.31	71.08
Urban			
Male	71.84	70.48	69.93
Female	60.31	58.49	58.1
Rural			
Male	81.62	78	77.62
Female	76.3	72.44	70.41

Source: Labour Force Survey

Table 1 also shows the composition of the labour force by educational attainment for other countries. There is one clear pattern: the work force has become more and more educated in all countries studied. At the head of the curve are South Korea and Taiwan, whose shares of employed workers with at least junior college degree are close to 20% by 1995. Recalling that by the HDI standard for international comparisons (see Preface), Vietnam in 2000 is comparable with Indonesia in 2000 and Thailand in 1985, the country is closely following these neighbours. By 2006, the percentage of Vietnam's work force with at least a junior college degree was 4.2%; this number was 3.6% in Thailand in 1990, and 2.7% in Indonesia in 1994.

Table 10 shows the gradual increase in average years of schooling of the Vietnamese labour force. Table 11, using data from the Labour Force Survey, shows that the proportion of workers with college degree and above increased slowly-consistent with the VHLSS data. The table also reveals that the proportion of workers with vocational training decreased over the years, causing the proportion of all skilled workers to also decrease.

Table 10: Vietnam's average years of schooling¹⁹ or working age population

	1993	1998	2002	2004	2006
All sample	7.43	7.42	7.48	8.13	8.30
Male	7.83	7.85	7.78	8.47	8.61
Female	7.05	7.02	7.18	7.78	7.99
Urban	8.77	8.92	8.96	9.81	9.84
Rural	6.96	6.94	7.00	7.51	7.72
Other minorities	6.1	6.0	4.9	5.7	5.8
Kinh&Chinese	7.6	7.6	7.9	8.5	8.7

Source: Author's calculation using VLSS and VHLSS

Table 11: Proportion of workers with skill in Vietnam

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	11.4%	12.5%	12.8%	7.6%	8.2%	7.4%	8.0%	8.4%	9.2%	10.0%
Vocational training	9.1%	9.9%	9.7%	4.2%	4.7%	3.8%	3.9%	4.1%	4.2%	4.7%
Junior college and above	2.3%	2.7%	3.1%	3.4%	3.4%	3.6%	4.1%	4.4%	4.9%	5.3%

Source: Labor Force Survey

Table 12: Educational inequality in Vietnam (Gini coefficient of schooling years)

	1993	1998	2002	2004	2006
All of Vietnam	0.344	0.309	0.289	0.279	0.267
Urban Vietnam	0.275	0.246	0.239	0.235	0.21
Rural Vietnam	0.353	0.316	0.291	0.282	0.277
North Vietnam	0.297	0.262	0.24	0.228	0.216
South Vietnam	0.389	0.356	0.328	0.323	0.309

Source: Table 9 in McCaig, Benjamin, and Brandt (2009)

One encouraging trend is the reduction in educational inequality in Vietnam, as shown in Table 12. From 1993 to 2006, the Gini coefficient of schooling years fell from 0.344 to 0.267. This inequality is more pronounced in rural and southern areas than in urban and northern areas. That the inequality of education has decreased might help explain why wage inequality has gone down in Vietnam, especially as wage employment is

¹⁹Note that in computing average years of schooling, most studies take 12 years as the maximum. For this table however, we count junior college degrees as 14 years of schooling, bachelor degrees as 16 years of schooling, master degrees as 18 years of schooling, and Ph.D. degrees as 21 years of schooling. As a result, our average years of schooling is higher than that in other studies.

becoming a more and more important source of income. This reduction in inequality might be a result of progressive allocation of public spending in primary education; poor households tend to get a larger share of it than richer households (World Bank 2006).

Figure 17: Years of schooling by country

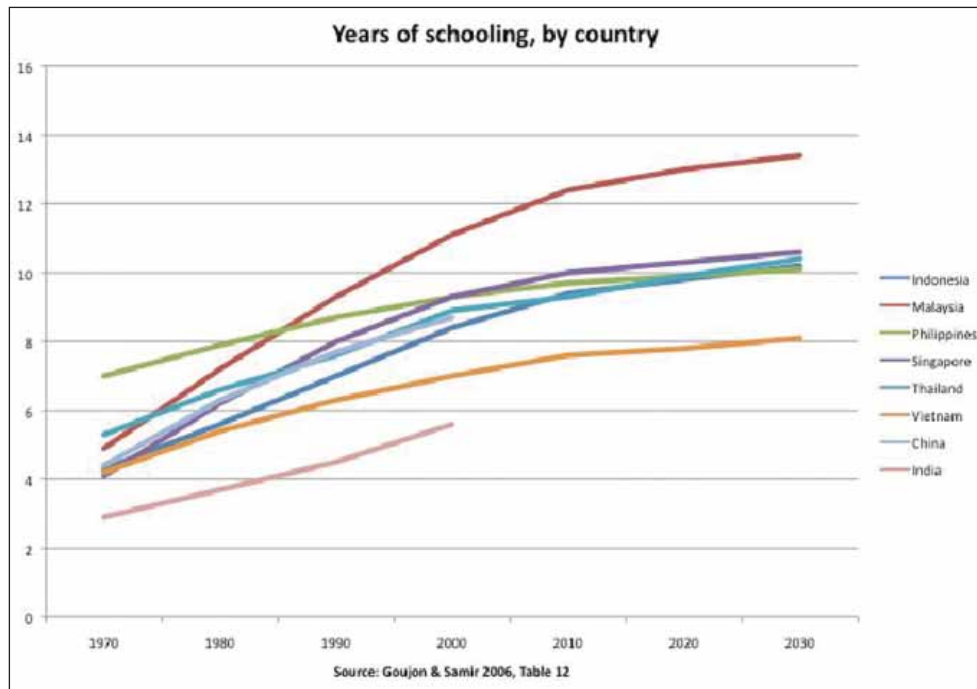
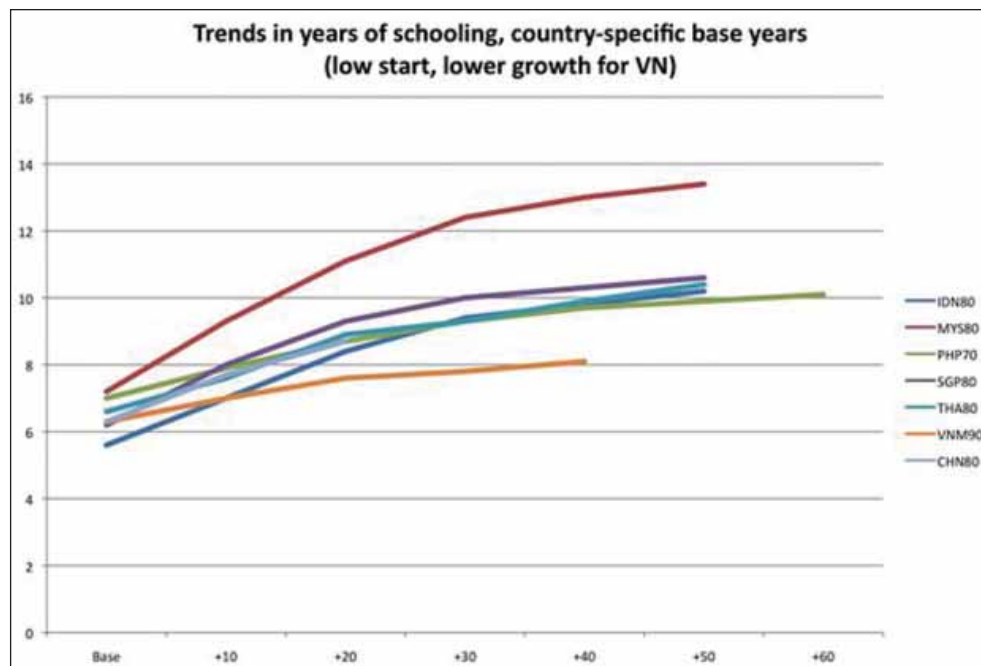


Figure 18: Trends in years of schooling (with country-specific base years)



Based on current trends the prospects for Vietnam's skills acquisition rate are not bright in a regional context. A recent study projects years of schooling for several Asian economies to 2020 and beyond (Goujon & Samir 2006). Based on current demographic trends and educational participation rates, Vietnam's labour force (aged 20-64) will by 2010 have an average of 7.6 years of schooling, rising only to 7.8 by 2020. At that point the Vietnamese data will be comparable to those for Singapore, Thailand and China in about 1990, or Indonesia in the late 1990s—with the important proviso that in each of those countries, average educational attainment had increased by at least one full year in the previous decade. By 2020, according to these projections, the average educational attainment of Vietnam's workforce will be 5 years lower than Malaysia and 2–2.5 years lower than China and the other SE Asian economies (Figure 18).

Labour productivity

We have seen that the level of labour productivity, or output per worker, is a key measure of economic welfare, and that rising labour productivity is a primary indicator of progress in economic growth. Labour productivity in Vietnam is very low by regional standards (Figure 3) although it has been rising relatively quickly during the *doi moi* era (Figure 11). Thus, Vietnam still has a very large gap to fill.

Figure 19 and Figure 20 present data on labour productivity by sector and by ownership. It is not surprising to find that industry has the highest output per worker, followed by services, and that agriculture has the lowest. However, low average growth rates of output per worker in industry (in the 2000s) and in services deserve closer attention (see Figure 21), given that these sectors generate close to 100% of new jobs. First, labour productivity gains can be due to improvement within each sector (intra-sectoral effect) or to reallocation of labour from lower to higher productivity sectors (intersectoral effect). According to APO (2009), the intra-sectoral effect dominates for most Asian countries.

Figure 19: Labour productivity by sector (million VND per worker, 1994 constant price)

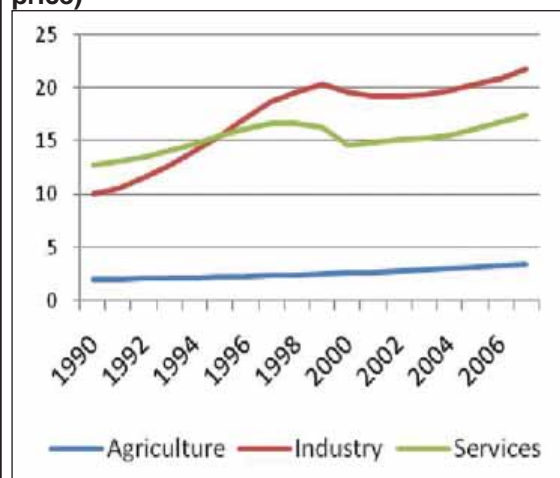
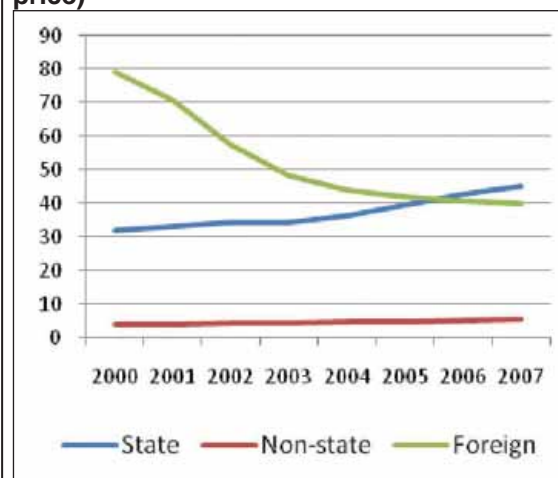


Figure 20: Labour productivity by ownership (million VND per worker, 1994 constant price)



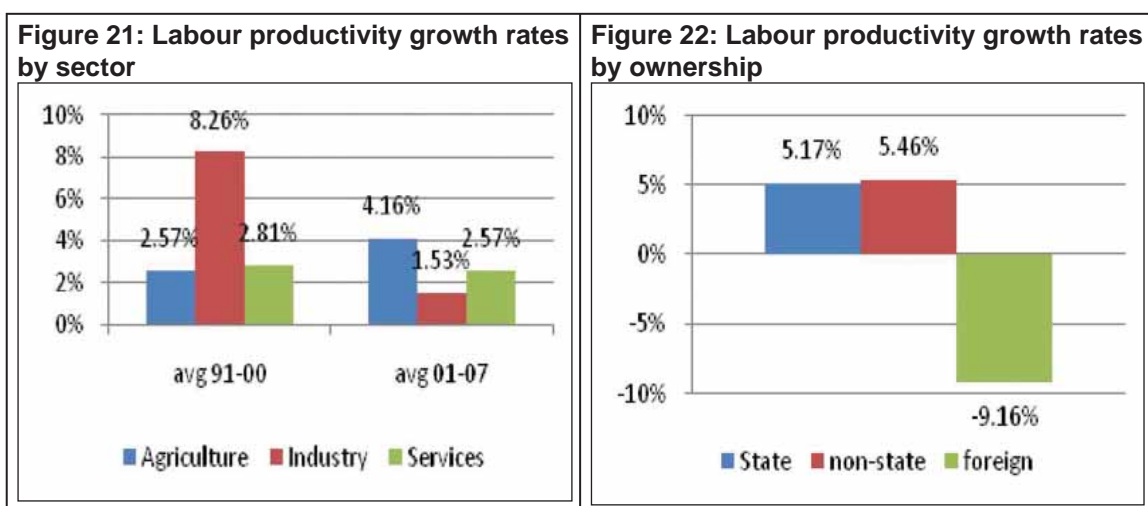
We see, however, that in Vietnam, the improvement in total labour productivity exceeds that of any single sector. This means that as the structure of the economy has changed, intersectoral labour mobility has been of very great importance to the overall rise in output per worker.

A second point is that labour productivity is measured here as an average for all skill levels, and the skills composition of each sector could be changing over time. Thus the low average growth rate for industry almost certainly reflects the changing composition of manufacturing, and in particular the rise to prominence of labour-intensive, low-skill industries like garments and footwear. This is confirmed by the strongly negative growth rate of labour productivity in foreign-invested sectors (see Figure 22), as they switched from more capital and skill-intensive to more labour-intensive over the past decade or more.

Third, output per worker in the State-owned sectors has remained high, even while their contribution to GDP has fallen. State-owned enterprises (SOEs) enjoy privileged access to cheap and abundant capital and receive proportionately more support for research and development and training²⁰. Yet they employ only about 9% of the labour force (CIEM 2009). High and increasing output per worker in SOEs probably reflects rising capital-labour ratios in production rather than overall productivity growth.²¹ This is evidenced in a firm-level study by Newman et al (2009), who find that SOEs are found to be less productive than domestic private enterprises once higher levels of investments and technology usage are controlled for. This indicates that the success of SOEs is highly reliant on government support to obtain cheap credit and subsidized research and development and training. Newman et al (2009) also find that larger firm size is associated with higher productivity. It's important to note that in Vietnam, firm size is also linked to firm's ownership structure: SOEs tend to be larger. In short, small- and medium enterprises in Vietnam are not facing a level playing field not only because they are small, but also because they are in the private sector.

²⁰According to GSO figures, 86% of enterprises receiving public support for research and development are state-owned (Newman et al 2009).

²¹Suppose an industry uses capital and labour to produce output, with Cobb-Douglas technology, $Y = ALaK^{1-a}$. Dividing by L gives output per worker ($y = Y/L$) as a function of capital per worker ($k = K/L$): $y = Ak^{1-a}$. So growth of output per worker could be due to total factor productivity growth (increase in A) or higher capital-intensity (increase in k). SOEs in Vietnam pay the highest wages of any sector by economic ownership (see next subsection) and face the lowest capital costs due to State subsidies. They typically operate under substantial protection from market competition, a condition known to erode incentives to innovate (i.e. to raise total factor productivity). Though hard evidence is lacking, on balance it is more likely that rising output per worker in SOEs is due to substitution of capital for labour—just as declining output per worker in FDI industries is probably due to just the reverse, a falling capital-labour ratio, as these industries zero in on products and technologies closest to Vietnam's global comparative advantage.



Wage employment and wages

Aggregate participation in wage employment has been increasing in Vietnam (see Table 13). While the rate of wage employment participation increased significantly for rural workers, it has decreased somewhat for urban workers. Perhaps, rural workers have been diversifying from self-employed work to wage work, while urban workers have been moving from wage work to self-employed nonfarm businesses. Also, while ethnic minorities have greatly increased their wage labour participation rate, they remain far below the average for the majority (ethnic Kinh and Chinese) groups.

Over the entire period covered by VHLSS data, average real wages have increased, consistent with a growing economy and rising labour productivity (Figure 23).²² Rapid wage growth was a common feature in Asian economies after wage suppression practices were lifted and as labour surpluses were exhausted. According to Fields (2002), South Korea experienced one of the fastest growth rates of real earnings in the world in the 1980s, averaging 7.7% per year. In Singapore, wage growth was a mere 2% in the 1970s despite a 9% GDP growth rate. This was due to a policy of wage repression, which was abandoned in the 1980s; real earnings grew by 79.8% in the next decade. In Hong Kong, real wages grew by 60% during the 1980s. And in Taiwan, real earnings doubled between 1980 and 1990.

The average wage change, however, masks considerable variation by educational attainment (a proxy for skills), as seen in Figure 24 and Table 14. In the early 1990s, there was hardly any difference in wages by education. This was consistent with a command economy in which wages were not set by market forces. But as Vietnam transitioned to a market economy, wages adjusted to reflect inherent productivity differentials. If we discount the anomalous 2002 data (see footnote 22) and looking over the entire period 1993-2006, the skill premium has increased dramatically. Wages for workers with the highest educational qualifications have risen by 300%, four times faster than

²²The 2002 data for wages seem highly questionable. Comparing previous and subsequent periods, they suggest that wage growth was very high in 1998-2002, when GDP growth was relatively low due to the Asian Crisis, and then was very low in 2002-06, when the economy was booming.

for workers with the lowest qualifications. This is entirely consistent with anecdotal evidence of an increasing shortage of skilled labour in recent years. According to CIEM (2008), only 30-40% of demand for high skilled labour is currently being met.

Table 13: Vietnam's rising wage employment

	1993	1998	2002	2004	2006
All sample	0.31	0.34	0.39	0.43	0.44
Male	0.39	0.43	0.49	0.52	0.54
Female	0.23	0.26	0.29	0.33	0.35
<i>Rural</i>	<i>0.27</i>	<i>0.29</i>	<i>0.53</i>	<i>0.56</i>	<i>0.57</i>
<i>Urban</i>	<i>0.46</i>	<i>0.49</i>	<i>0.35</i>	<i>0.39</i>	<i>0.4</i>
<i>Other minorities</i>	<i>0.21</i>	<i>0.25</i>	<i>0.27</i>	<i>0.31</i>	<i>0.34</i>
<i>Kinh & Chinese</i>	<i>0.32</i>	<i>0.36</i>	<i>0.41</i>	<i>0.46</i>	<i>0.47</i>

Source: Author's calculations using VLSS & VHLSS

Note: this is percentage of employed workers having wage employment, which could be primary or secondary job, and could be agricultural or non-agricultural job.

Table 14: Wage growth by educational attainment

	93-98	98-02	02-06	93-06
No degree & primary school	29%	11%	22%	75%
Lower secondary school	51%	48%	-2%	120%
Upper secondary school	76%	63%	1%	190%
Junior College and above	159%	54%	0%	301%

Source: Author's calculation using VLSS & VHLSS data

But if we include 2002 data, then the increase in wage differential by educational level has leveled off or even decreased since 2002. Other indicators of wage inequality such as the overall Gini coefficient or the rural/urban wage ratio also tended to decrease since 2002 (see Figure 25). Given the rising importance of wage incomes, this reduction in wage inequality might partly explain the reduction in income inequality presented earlier, which also started in 2002. If such numbers are to be believed, then the labour market in Vietnam is offering a promising channel through which poverty reduction might occur and inequality might be reduced. This has been demonstrated in Phan and Coxhead (2010), who show the importance of labour mobility, or migration, in reducing regional income differences: provinces that sent more migrants to the growing urban centers have lower income gap with the urban centers than provinces that could not send many migrants, controlling for various provincial characteristics.

Figure 23: Increasing hourly wage in Vietnam ('000 VND)

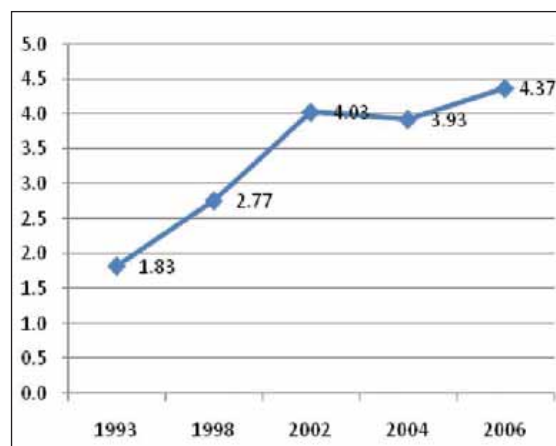


Figure 24: Widening wage differentials (ratio of mean wage between various education levels; denominator is no degree or primary school category)

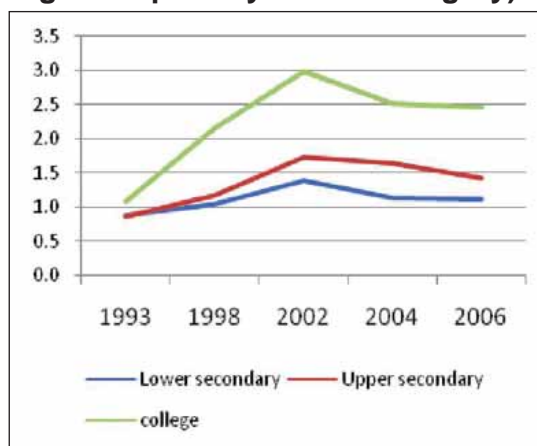


Figure 25: Changing wage inequality in Vietnam

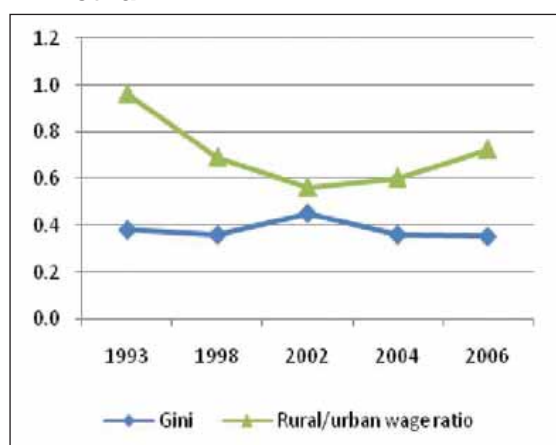
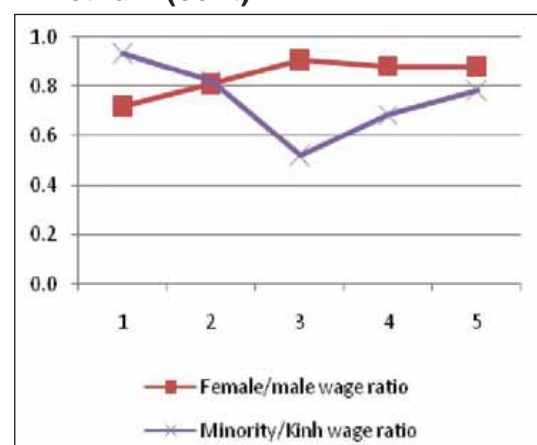


Figure 26: Changing wage inequality in Vietnam (cont)



There are currently no studies examining why this reduction in wage inequality since 2002 might have happened. But we propose several hypotheses. One is the decrease in educational inequality discussed earlier, a result of progressive public spending in education. Another is that while there remain barriers to labour mobility in Vietnam (see section on urbanization below), it might have improved in the 2000s compared with the 1990s. The influence of the ho khou system as an impediment to labour mobility has diminished over the years, although it's not completely gone. Improvements in infrastructure, in particular the road system (World Bank 2006), clearly made transportation costs lower. And larger migration networks by the 2000s would reduce migration costs significantly relative to the 1990s.

3.3. Urbanization

Preliminary results from the 2009 Population Census indicate that Vietnam's total

population as of April 1, 2009 was 85.8 million. This places Vietnam as the third most populous country in Southeast Asia and 13th in the world. The urban population is over 25 million people (29.6%), and has increased by 3.4% per year. It is forecast to rise by 2020 to at least 35% (UN) or 45% (Vietnam Ministry of Construction). Table 15 compares urbanization in Vietnam and other countries in the region. The rate for Vietnam is high and similar to that of Indonesia, while China, Malaysia and especially Thailand have been substantially lower.

Table 15: Rates and levels of urbanization - selected countries

Indicators	China	Indonesia	Malaysia	Thailand	Vietnam (ILO)	Vietnam (GSO)
Ave. ann. urbanization rate (2000-05)	3.1	4.04	3.69	1.49	3.13	3.75
Ave. ann. urbanization rate (2005-10)	2.7	3.34	3	1.66	3.08	2.89
Total population 2005 ('000)	1,312,979	226,063	25,653	63,003	85,029	83,106
Urban population 2005 ('000)	530,659	108,828	17,345	20,352	22,454	22,337
Level of urbanization 2005 (%)	40.4	48.1	67.6	32.3	26.4	26.5
Forecast total population 2025 ('000)	1,445,782	271,227	33,769	68,803	106,357	
Forecast urban population 2025 ('000)	822,209	178,731	27,187	29,063	40,505	
Forecast urbanization 2025 (%)	56.9	65.9	80.5	42.2	38.1	
Agglomeration	Shanghai	Jakarta	K. Lumpur	Bangkok	HCMC	
Urban population 2007 ('000)	14,987	9,125	1,448	6,704	5,314	5,398
As percentage of urban population	2.67	7.81	7.83	31.89	22.24	23.07%

Source: World Urbanization Prospects: The 2007 Revision.

Within the country, the Southeast Region (Binh Phuoc, Tay Ninh, Binh Duong, Dong Nai, Ba Ria-Vung Tau and Ho Chi Minh City (HCMC)) has the highest population growth rate of 3.2%, and also the highest urbanization rate. Among them, the highest population growth rates are Binh Duong (7.3%) and HCMC (3.5%), at which rate the city's population is expected to reach 10 million people by 2020. Hanoi (including Ha Tay) will reach approximately 9.5 million. However, there have been debates among policy makers and researchers about the true size of Hanoi and HCMC. The movement of "temporary" migrants from the rural areas to big cities has made it extremely difficult to obtain accurate counts. As in China, urban populations could be heavily underestimated. Pincus and Sender (2007) argue that serious problems with the design of the VHLSS, widely used in the assessment of poverty and various socioeconomic activities including migration, resulting in an underestimation of the numbers of very poor people and specifically of poor migrants in big cities. Other studies, using econometric methods based on income differentials and previous migration rates, estimate much higher rates of population growth in HCMC than do the official statistics (Phan and Coxhead 2010; Phan et al. 2008).

In part because of uncertainty about the accuracy of the VHLSS, it is difficult to characterize the urban population of Vietnam's large cities. In keeping with the impression of city growth as driven by the expansion of labour-intensive manufacturing and services industries, most migrants seem to have moved for economic reasons or to accompany economic migrants, rather than for schooling. Table 16 shows that 85% of young migrants (15 to 29 years old) under KT4 registration status in Ho Chi Minh City were not in school. This is unlike Jakarta, where there is evidence showing that migrants were disproportionately younger and had higher education levels than non-migrants. The Vietnamese urbanization pattern underlines once again the issue of spatial labour mobility as a response to Vietnam's growing economy and changing production structure.

Table 16: KT4 Residents by Age and Education Status, Ho Chi Minh City 2004

	In School		Not in School		Never attended school		Total
	Number	%	Number	%	Number	%	
5	-	0%	-	0%	3,535	100%	3,535
6 to 14	20,732	76%	5,809	21%	809	3%	27,350
15 to 29	87,977	15%	508,615	85%	2,216	0%	598,808
30+	2,322	1%	190,377	97%	3,890	2%	196,589
Unknown	-	0%	306	100%	-	0%	306
Total	111,031	13%	705,107	85%	10,450	1%	826,588

Source: Pincus and Sender (2007)

Until recently, migration to Vietnam's large cities took place in spite of restrictions on access to social services in the destination (the ho khau household registration system). This system has been relaxed, but not abolished entirely; rather it has been replaced by the four-tier KT system, which designates residential status and defines the rights of each KT level (Waibel 2007). A 2004 survey in HCMC revealed that over 87% of migrants to HCMC hold the lowest level certificate (KT-4), and are officially classified as temporary workers (Waibel 2007; GSO/UNFP 2005).

Even though the practical relevance of the KT system may have diminished over time, it remains a barrier to migration, most especially for families, equivalent in nature if not in degree to China's hukou. Perhaps the most important consequence of such a large population of 'floating migrants' in the large cities is that because they are designated as residing permanently in other localities, the populations of cities where they actually live (HCMC and Hanoi) are systematically underestimated for the purposes of provision of publicly funded infrastructure, utilities, and social services. This greatly adds to problems of congestion, poverty and insecurity in large cities, and of course the lack of services is felt primarily by the poor, and reduces the real utility they derive from their employment. This in turn reduces labour mobility by raising the cost of migration to and establishing residence in large urban areas. In this way, policies on urbanization—even such apparently innocuous phenomena as how residence is defined—act as de facto interventions in Vietnam's labour market.

3.4. An assessment

Vietnam's rapid growth has drawn many new workers into the labour force and has caused many others to change location and/or occupation in response to evolving industry demands. Is Vietnam exhausting its supply of 'surplus' labour? The numbers presented earlier show that the employment growth rate is exceeding labour force growth, though only by 0.1% per year. However, real wage growth has not been high in the 2000s despite rapid growth of aggregate output per worker. Unlike most other Asian countries, a large share of the productivity growth gain has come from intersectoral labour movements, rather than productivity growth within sectors, and despite this migration, agriculture remains the sector that employs the largest number of workers. Most workers, moreover, are employed in the informal sector, and thus are for many purposes beyond the purview of labour market regulations and statistics. Official unemployment and underemployment rates published by the GSO and MOLISA are almost certainly underestimates. We believe there is still much labour surplus in Vietnam. This has important policy implication, which will be picked up in section 5.

We observe the following issues in the Vietnamese labour market. First, output growth has not been sufficiently employment-intensive. In particular, the manufacturing sector has not generated a huge jump in jobs relative to output, as happened in other countries such as Thailand when undergoing similar transitions (Coxhead and Jiraporn 1999). This has slowed the pace of structural change in employment, leaving a disproportionate number of workers in agriculture, where productivity is very low. The service sector, while generating much new employment, has low productivity, low wages, and low job security.

Second, while productivity has improved in most industries, there is evidence of widening productivity gaps in the most productive sectors. Moreover, there remain large productivity differentials between large enterprises in the state sector and SMEs in the private sector. Yet these productivity differentials are a result of government support for SOEs, not a result of the true productivity potential. Once these supports are controlled for, private SMEs turn out to be more productive and they also generate a lot more jobs. As explained in point (iv) in section 2.5, a balanced mix of enterprises of different sizes and productivity is an essential feature allowing the NIEs to grow with equity. Vietnam should try to do a better job of creating this balance.

Third, Vietnam's supply of educated labour needs to grow faster. By international standards, the Vietnamese labour force is low-skilled, and in this respect – and in spite of very rapid GDP growth -- is not catching up with its regional neighbours. As seen in section 2, a key contribution to the success of the NIEs was their heavy investment in human capital at an early stage—even ahead of effective demand. This helped them avoid 'sudden stops' of growth (as experienced by Thailand in the mid-1990s), instead facilitating a smooth transition from labour-intensive to skill-intensive industries. The SE Asian economies, in particular Thailand and Indonesia, have been much slower to invest in human capital. Vietnam should try to avoid such mistakes.

Fourth, urbanization inevitably accompanies economic growth, and to starve cities of funds needed to plan and develop is equivalent to raising the costs of urban-based

industries, by raising real labour costs and creating disincentives for workers to seek urban jobs. Official predictions of future urban growth almost certainly underestimate true rates, and if fiscal transfers and public investments are based on these numbers rather than more realistic data (Ninh and Vu 2008) then it is likely that Vietnam's megacities in the future will more closely resemble Jakarta or at best Bangkok, rather than Seoul or Taipei.

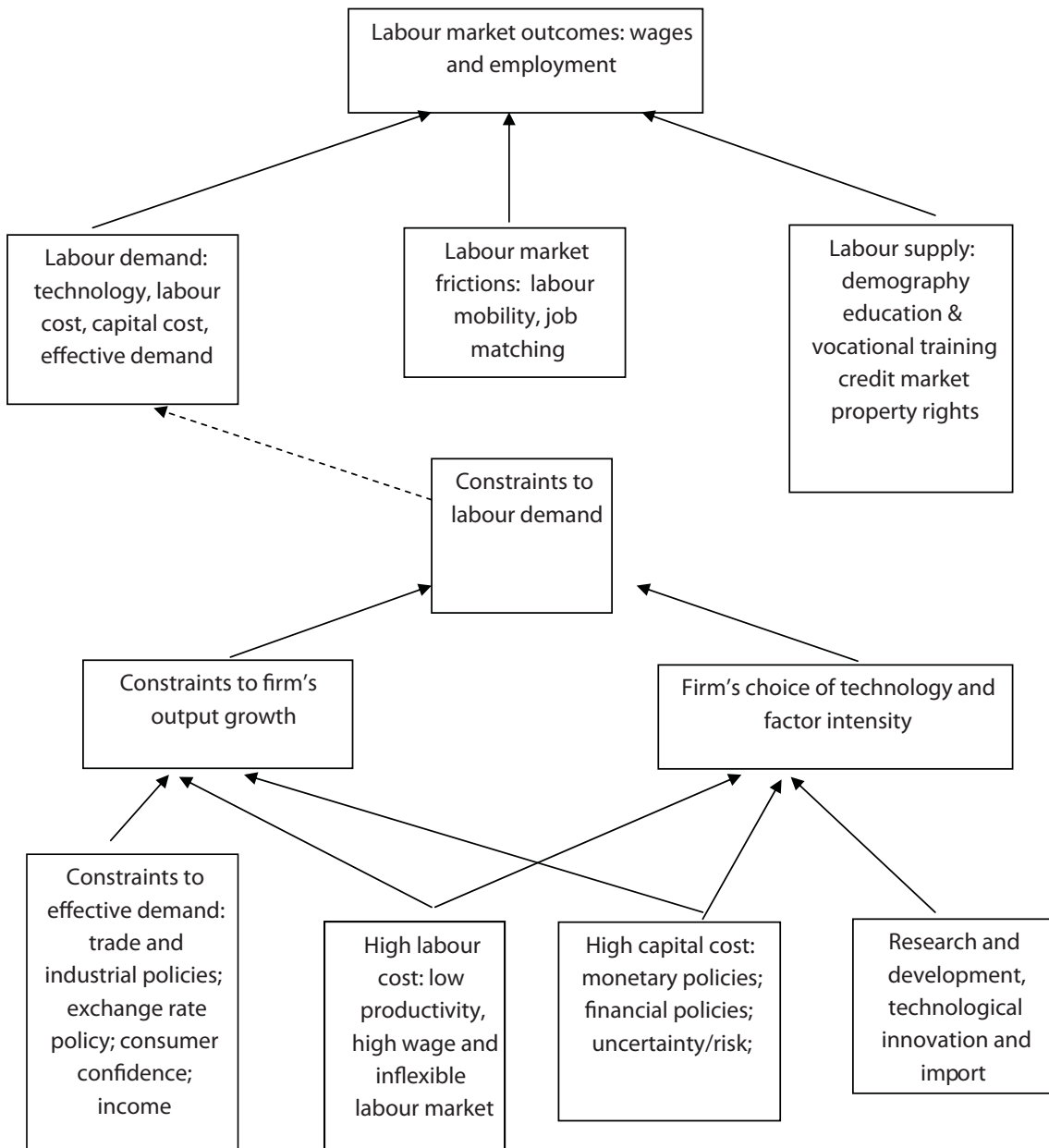
3.5. Taking stock and looking forward: labour policy and institutional issues

3.5.1. Framework

In this section, we examine how domestic policies and institutional structures have impacted the outcomes of the Vietnamese labour market. We frame our discussion around a diagnostic analysis of how the labour market operates. The top part of Figure 27 shows factors affecting labour demand, labour supply, and the frictional costs of matching demand with supply, all of which help determine labour market outcomes—that is, wages and employment. Government interventions that can affect frictional labour market costs include the provision of employment services or employment information centers; regulations on regional migration, etc. Policies that can affect labour supply include not only direct interventions such as education and vocational training, but also indirect measures such as credit subsidies and property rights (active land markets and access to credit make it easier and cheaper for farmers to leave their own location in search of jobs elsewhere; this effectively increases the available labour supply to faster-growing areas).

The lower part of the figure shows factors that can constrain labour demand growth. There are four of these. First, constraints to effective demand include any policy that reduces output demand. For example, an overvalued exchange rate causes the export sector to become less competitive internationally. Removing this constraint will boost export demand and hence employment. Similarly, a loss of consumer confidence causes a drop in aggregate demand, so removing this constraint might involve a government stimulus package.

Second, high labour costs will retard firms' growth. High labour costs have various causes, including low labour productivity due to lack of skills, and high wages due to an inflexible or distorted labour market. If low productivity is the constraint, then human capital investments will help relax it. If labour market inflexibility or other distortions are the constraints, then relaxing these, perhaps through reform of labour market regulations, will help solve the problem.

Figure 27: Diagnosing Employment Growth in Vietnam

Third, high capital costs will also retard firms' growth. High capital costs might be due to tight monetary policy or reluctance on the part of the banking sector to extend credit. These are problems to be addressed with macroeconomic policy measures. Or capital costs might be high because of too much uncertainty in the market; reforming the financial system to help spread/reduce risk is one potential solution.

Finally, research and development (or transfers/imports of technology) will affect the technology available to firms. Availability of technology, together with the cost of capital and cost of labour, determines which production processes firms will adopt, and thus the labour-intensity of production. The technology adoption decision combined with a

given output growth will determine the overall increase or decrease in labour demand. Obviously, adoption of a labour-saving technology will lower demand for labour in general; similarly, adoption of a skill-biased technology will raise demand for skilled labour.

Based on this diagnostic model, we identify the following policy and institutional issues. First, there remain high frictional costs in the labour market. The current system of employment centers is not yet effective in matching labour supply with labour demand (see further discussion below). Moreover, there remain barriers to labour mobility, causing the labour market to be partially segmented, as evidenced by persistent productivity and wage differentials by gender, ethnicity, rural vs. urban, industry, ownership type etc. (see section 3.2). The typical barriers to labour mobility in Vietnam include:

- **Ho khau:** similar to the hukou system in China, the ho khau system in Vietnam impedes population movements, especially rural-urban migration. That said, the ho khau system in Vietnam has been relaxed much faster and to a much larger extent than in China. This helps explain Vietnam's lower rural-urban inequality gap.
- **Discrimination:** for example, ethnic minorities tend to have lower wages than the Kinh majority, controlling for covariates such as education, experience, industry, or location. This indicates that they are facing discrimination or are being deterred from entering certain jobs or industries. Such discrimination exists because the government has failed to enact policies that prevent it from happening.
- **The Labour Code** tends to favor one group of workers over another and restrict labour mobility (see further discussion below)
- **Capital market failures** and insecure property rights in rural areas, and congestion and insecurity in cities, constrain rural-urban migration.

Second, employment growth in Vietnam has been slow due to two policy failures. The first one is a skewed capital cost structure that favors capital-intensive industries in the state sector, causing more investments to flow into such industries. The private sector, which generates far more employment, does not have sufficient access to credit. Attempts by the government to promote small household enterprises in rural areas under its employment generation programs have not been successful (see further discussion below). The other policy failure is the government's inability to increase the quality of the labour force, or to develop an effective vocational and educational training system that meets the demand of the labour market. Lack of skills or low labour productivity means high labour costs, which discourage new investments and retard growth of output and employment.

3.5.2. Labour market policies

Followings are the current major labour market policies in Vietnam:²³

1. Employment policies: the 1992 Decree 120/HDBT declared that employment policies are set within and linked to the country's general strategy of economic development. The government's role is not to directly generate employment, but to provide financial assistance and liberalize the markets so that labourers and enterprises can generate employment. The National Employment Fund was established to serve several main purposes:
 - To provide loans at subsidized interest rate for workers to create employment on their own; in the rural areas, such subsidized loans are geared toward both agricultural development and rural industrialization/transformation (promotion of SMEs, traditional handicrafts, and other rural non-farm employment); loans for labour export have also been encouraged
 - To create employment centers with following primary responsibilities: job search assistance, vocational training, and labour market research (Decision 146-LDTBXH-QD)
 - To assist in vocational and education training (poor households, ethnic minorities, or households in remote/poor regions often given preferential treatment such as reduced or free tuition fee, subsidized loans for training purposes)
2. Labour laws and regulations: drafted in 1994, passed in 1995, and amended in 2002, the Labour Code regulates labour interactions between employers and employees, specifying rules regarding employment contracts, wages, occupational safety and health, working hours and holidays, social security, trade unions, resolution of labour disputes, special provisions concerning female, young and other categories of workers, labour administration, and state labour inspection.

To our knowledge, there are hardly any empirical studies that prove or quantify the effectiveness of these labour market policies or their impacts on the Vietnamese labour market. This creates difficulties in evaluating these policies. There are however various qualitative analyses, on which our discussion is based.

Regarding employment policies, MOLISA (2009) has noted that the number of jobs created has been insufficient; employment centers have not met the demand of job seekers, especially those in remote and mountainous regions; vocational training has not met the demand of the labour market; and rural non-farm employment generation and rural transformation have been slow. Nguyen (2002) points out some other concerns. The subsidized loans are often in small amounts, so most jobs created by these loans are short-term or part-time. They do not go hand-in-hand with vocational or

²³ Non-labour market policies including trade, industrial, enterprise, investment policies also have direct and indirect impact on the labour market. Within the scope of this paper and of this section however, we focus on discussing labour market policies only.

educational training, another reason for the short-term nature of the jobs created. There are also various issues with management. And finally, poor people tend to have difficulty accessing these loans. To obtain such loans, borrowers need to present a business plan, which might be beyond the capacity of poor people given their lower educational attainments. In addition, these loans tend to be complementary to another other sources of larger loans, and most of the time poor people do not have these other sources.

We find that the current vocational and educational training policies of Vietnam have mostly focused on achieving certain “numeric” goals from the supply side, and pay little regard to the demand of the labour market. The result is low employability of trainees and mismatch between supply and demand. There are two approaches to this. One is to try to strengthen links and coordination between training providers and local firms. This is to keep training providers updated with labour market information and the needs of firms. This is the approach that is currently implemented in Vietnam. However, it has not shown to be effective so far, perhaps because of the poor capacity of training providers or because of the government’s failure to promote the coordination.

The other approach is to bring the private sector directly into the picture. That is, firms should be required by law to contribute toward the training of their employees-and in return, should be given a voice in decision-making over the design, administration and location of training programs. Firms understand their own human resource needs better than vocational training providers. Involving firms in the training of their own workers will help solve the problem of mismatch between the skills of the trained workers and the demands of the market. In addition, investment in human capital is an impure public good; as a result, firms have the tendency to under-invest in the training of their own employees and opt for “poaching” trained employees from the market. Involving them in training, and asking them to bear part of the cost, help correct this market failure by correctly aligning incentives for all parties. The NIEs have generally been successful in involving the private sector in vocational and educational programs, either through direct training or via financial contributions. Another important point is that training must be provided not only to new entrants into the labour market, but also to existing workers (those who are already employed).

Regarding labour laws and regulations, the Labour Code’s effectiveness has been questioned. On the one hand, it fails to protect the benefits and rights of the majority of workers. This is because its actual coverage is very limited and compliance is poor. Given that the Labour Code applies only to enterprises with at least 10 workers, it excludes a significant part of the Vietnamese economy, notably the informal sector. Even within the formal sector, its provisions are not uniformly applied. For instance, within the public sector, only SOEs’ employees are governed, so civil servants, public employees, members of social organizations or collectives, members of armed forces or police, etc. are all excluded (Nguyen, Loi, and Nguyen 2006, pp. 591). Furthermore, ignorance of the Labour Code and excess labour supply tends to weaken workers’ bargaining power and or their capacity to organize and petition for workers’ rights.

On the other hand, in instances where the labour laws are applied and enforced, they tend to have the effect of segmenting the labour market, restricting labour mobility,

and increasing inequality, rather than facilitating the functioning of the labour market. This is because the Labour Code reinforces the dual-economy structure in Vietnam. Labourers in the state sector have more rights and protection under the Labour Code than labourers in the non-state sector (McCarty 2002 pp. 8). Data on wages in section 3 have shown that there are large wage differentials between workers in SOEs, foreign-invested and larger private firms, and self-employed or agricultural workers. That the Labour Code only applies to the former but not the latter is only widening the wage and income gap between the two segments of the economy, especially when access to jobs in the former is due to social networks rather than to workers' credentials.

The Labour Code also restricts labour mobility in some other ways. For example, social security and work benefits are non-transferrable. This means that state employees wishing to join the private sector might be deterred from doing so because they cannot transfer their pension and health insurance coverage. Or it might create situations in which SOE workers are "leased" to private sectors so they can continue enjoying the benefits of social insurance (McCarty 1999). The Labour Code also discriminates against foreign-invested enterprises and creates a dual-wage economy. For the non-state sector, the minimum wage does not seem to affect the actual wage because market wages are usually higher than the minimum wage (McCarty 1999 pp. 13 and Belser 2000 pp. 20). However, there are large differences between minimum wages for domestic and foreign-owned enterprises. Belser (2000) shows that the minimum wage is binding for foreign-invested firms, where market wages tend to be lower than minimum wages, which lead many foreign-invested firms to evade the law. There are concerns that this might adversely impact the attractiveness and competitiveness of Vietnam's labour-intensive sectors. However, we lack empirical evidence on this point. CIEM (2009) states that Vietnam's government has announced its intention to unify wages.

The issue of labour market segmentation has been seen in other developing countries with high inequality, such as India (see analysis of the Indian labour market in section 2). It was mentioned in section 2.2 that one of the key factors contributing to growth with equity in the NIEs was the relative absence of labour market policies that favour a small proportion of workers at the expense of the large majority of workers. The way the current Labour Code is designed and applied contradicts this feature. This is an area that Vietnam needs to improve: to pass and enforce labour laws that protect the rights of the majority of its workers equally.

4. GROWTH, MOBILITY AND ECONOMIC WELFARE: POLICY SIMULATIONS

4.1. The simulation model

In this section we seek to unpack and analyze the effects of some aspects of economic growth and policy reform on the Vietnamese economy. To do this with rigor requires a framework capable of capturing the macroeconomic consequences of growth or policy “shocks”, and tracing these in a consistent manner through markets and other economic channels down to sector, regional and household level.

An appropriate approach to this task is to use an applied general equilibrium (AGE) model. Such models represent the entire economy in simplified numerical form. They combine baseline information from the national accounts and other sources about the decisions and activities of firms, households, enterprises and government with theory-based specifications about market operation, labour, capital and resource supplies, trade balances and other constraints, and the assumed behavior of foreign agents who are the partners in trade and investment. They thus provide a consistent interface between macroeconomic and microeconomic phenomena.

We use an AGE model of the Vietnamese economy to observe the effects of growth or policy shocks on the prices faced by producers and consumers, and through their reactions to these, to trace effects on the markets for labour, land and capital, consumer choices, and other consequences. Because households have different patterns of asset ownership, income, and expenditure we can measure effects on income distribution and poverty. The model is based on ongoing collaborative research between U.S. and Vietnamese partners and is described more fully in Coxhead et al. 2008.

The modeling platform that we use is based on a “standard” CGE template that has been widely applied in developing countries (Lofgren et al. 2002). The template provides for factor supply, production, domestic and international trade, and consumption, savings and investment by a variety of domestic agents and institutions. Here, to save space we merely summarize the features most relevant to the work addressed in this paper.

Labour and labour markets. The model identifies three aggregate primary factors: land, labour, and capital. Labour is a composite of twelve different types, distinguished by gender (M/F), location (urban/rural), and skill (low/medium/high). These categories are based on data in the 2003 Vietnam Social Accounting Matrix (SAM). Labour demands are derived in the usual way from profit-maximizing choices made by a representative firm in each industry. The model posits a nested factor demand structure, with composite factor demand decisions at the top level and demands for each type of labour determined at the next level.

In order to conduct experiments we must make assumptions about labour supply, pricing, and mobility across locations. Because there is little empirical research to guide us, we explore several alternatives, or closures.

Closure 1 assumes that labour of each type is fixed in total supply, so that an increase in demand for that type of labour from one or more industries (job creation) must be matched by an equal reduction (job destruction) in one or more others. In this closure we also assume that rural labour cannot move to urban areas, and vice versa. Closure 1 is based on very restrictive assumptions and exists only as a reference point.

Closure 2 retains the assumption of fixed total quantities of each type of labour, but permits migration between rural and urban regions. If an urban-based industry (e.g., garments) seeks to expand, it can draw on workers of a given type (e.g., female, medium-skill) from either urban or rural areas. In this closure, migration in response to growth of labour demand in specific industries provides a channel to redistribute the gains of growth from one part of the economy to others. Because we assume a fixed total supply of labour, changes in labour demand also alter wages.

Closure 3 alters closure 2 by assuming that the supply of unskilled labour is elastic at a given (constant) wage. In this closure, job creation in one location and industry can draw in workers from other sectors but also from a pool of unemployed workers. We think of this as reducing underemployment, which is quite high in Vietnam (see section 3 of this report). In this closure we continue to assume a fixed supply of medium and high skill workers, since unlike unskilled workers they are in short supply in Vietnam.

In each closure we assume that some capital in each industry is fixed (immobile) there, while other capital is mobile, that is can be reallocated across sectors. We also assume that trade plus international capital flows add to zero (balance of payments equilibrium) with no change in the government's budget deficit.

The model contains 16 household types, distinguished by location (urban/rural), sex of household head (M/F), and primary income source (farm, own-account, non-farm, unemployed). Households earn income from their ownership of labour, land and capital, and from transfers, and spend it on a range of goods, both those produced domestically and also those imported from abroad.

For purposes of welfare analysis, we augment this model by linking it to the corresponding VHLSS data, which contains information on the incomes and expenditures of some 4,000 households nationwide. This link, from the 'macro' model to 'micro' data, makes it possible simultaneously to conduct two types of experiment. One type is macrosimulations, or experiments in which we examine the effects of a growth or policy shock on macroeconomic aggregates such as GDP, CPI, wages, employment and industry outputs. The other type is microsimitations, in which we trace the effects of the same shock(s) to the incomes and expenditures of individual households, or to regional and other aggregates. This enables us to draw conclusions about the effects of the shock on income distribution and poverty, both nationally and for subsets of the population, such as urban and rural households.

4.2. Policy experiments

This paper has focused on job creation and labour mobility as particular policy concerns for low-income developing countries like Vietnam. To explore the possible effects of growth and policy shocks we choose as an experiment the scenario of increased investment in labour-intensive, export-oriented manufacturing industries. In Vietnam, these industries are mainly garments and textiles, leather goods, electronics, and furniture and wood products. The experiment applies a 25% growth shock to the capital stocks of these industries.²⁴

This experiment is obviously a very strong simplification of a real-world policy shock. Most importantly, we do not account for the source of new capital invested in export industries. Thus our predictions of aggregate gains (increase in GDP) overstate the true gains to the extent that we neglect these costs. We focus, however, on other important indicators: job creation or destruction by labour type and sector; wage and income growth by labour type; household income distribution changes, and changes in poverty. These, it seems to us, are (or should be) the fundamental concerns of the Vietnamese government when formulating development policy.

4.3. Results

The experiment imposes an above-trend growth rate of capital stocks in the export manufacturing sectors, while the rest of the economy continues to expand at trend. Thus our results show changes that are predicted to take place over and above the effects of 'business as usual' growth. Our main point is to highlight the effects of the shock on poverty, and to do so under differing labour mobility conditions.

Table 17 summarizes the main macroeconomic results of the experiment. Table 18 and Table 19 summarize the main effects on wages and employment by labour type, and on poverty and income distribution by household type.²⁵

The first row in Table 17 shows that the investment growth raises GDP growth (for example, the growth rate of GDP increases by 0.34% in the first labour market closure). The effects of labour mobility and supply flexibility on aggregate growth are clear: compared to the case when labour cannot move between rural and urban areas, GDP growth is faster (0.37%) when migration is possible, and faster still (0.46%) when the supply of unskilled labour is flexible. Because the growth occurs in non-farm sectors, manufacturing employment and output increase, by about 1% and 2% respectively. Agriculture and services employment and output contract slightly in the first two labour market closures. This is because with a fixed total number of workers, the new jobs created in manufacturing require that workers depart from other industries. In the third closure, unskilled labour is abundant; we see that the contraction of agriculture

²⁴ In another paper for UNDP/DSI, "Accelerating Growth in Agriculture Productivity and Rural Incomes in Viet Nam: Lessons from Regional Experiences", we report results from additional policy experiments with this model.

²⁵ A more complete set of results, including breakdowns of poverty and distributional gains by household type, gender of household head, and region are available from the authors on request.

and services is smaller (and services actually expands by a small amount), while manufacturing growth is faster still. These results underscore the complementarity between labour mobility and economic growth.

Table 17: Macroeconomic effects of capital growth in export manufacturing (percentage change)

	Labour market assumptions		
	No migration, fixed total supply of each labour type	Migration, fixed total supply of each labour type	Migration, flexible supply of unskilled, fixed supplies of skilled labour
Change in real GDP (%)	0.344	0.37	0.464
Change in CPI (%)	0.067	0.108	0.085
Employment change by aggregate sector (%)			
Agriculture	-0.417	-0.569	-0.379
Manufacturing	1.003	1.112	1.27
Services	-0.195	-0.071	0.066
Output change by aggregate sector (%)			
Agriculture	-0.322	-0.429	-0.32
Manufacturing	2.04	2.113	2.199
Services	-0.166	-0.08	0.009

Table 18 shows the effects on factor returns. When labour is immobile (closure 1), virtually all the gains from urban job growth accrue to urban workers; their earnings rise five times faster (0.94%) than those in the rural economy (0.18%). The immobility of labour excludes rural workers from the direct gains of growth and so contributes to a substantial widening of the urban-rural wage gap. Labour mobility changes this in dramatic fashion. When rural-urban migration is possible (closure 2), the export industries can hire new workers from either urban or rural areas (we have assumed no migration costs). Now, wage growth is at identical rates for rural and urban workers of each type. The gains from urban-centered growth are thus spread to the countryside as rural workers take advantage of opportunities to move to higher-productivity, higher-wage occupations. Skilled workers gain from this, but of greater significance is the rise in wages gains to rural unskilled workers, from 0.186% without migration, to 0.471% when occupational mobility is augmented by spatial mobility. The urban-rural wage gap for unskilled workers thus diminishes.

In the third closure, the supply of unskilled labour is flexible, and its wage is constant in real terms (the 0.085% wage increase is the same as CPI growth, see Table 17). The increase in unskilled labour supply (0.228%, a small change but in a very large fraction of the labour force) raises the productivity of workers of all other skill types, and so their wages rise by even more than in closure 2.

The distributional and poverty consequences of the shock can be seen in Table 19. Household income changes rise in line with overall GDP: the rise in national average income is higher when internal migration and flexible labour supplies allow for higher productivity growth. National poverty declines, especially when migration allows relatively poor rural workers to take urban jobs. But the decline is offset slightly when unskilled labour supplies are flexible; this is because the wages of this large group of workers do not rise appreciably even though their hours worked do increase somewhat. The modest increases in the Gini coefficient, both for the country as a whole and within urban and rural groups, confirm that income distribution may worsen even though the experiment simulates expansion in a labour-intensive industry, and even when the jobs created there are open to all workers regardless of location. But in the context of rising household incomes and declining poverty in both rural and urban areas, the small increase in inequality is a second-order effect with minor policy implications.

Table 18: Wage and employment effects of capital growth in export manufacturing (% change)

	Labour market assumptions		
	No migration, fixed total supply of each labour type	Migration, fixed total supply of each labour type	Migration, flexible supply of unskilled, fixed supplies of skilled labour
Change in real wage (%)			
Rural male unskilled	0.186	0.471	0.085
Rural male medium-skilled	0.184	0.73	1.231
Rural male high-skilled	0.183	1.153	1.611
Rural female unskilled	0.186	0.472	0.085
Rural female medium-skilled	0.184	0.799	1.293
Rural female high-skilled	0.183	1.102	1.565
Urban male unskilled	0.945	0.471	0.085
Urban male medium-skilled	0.945	0.73	1.231
Urban male high-skilled	0.945	1.153	1.611
Urban female unskilled	0.945	0.472	0.085
Urban female medium-skilled	0.945	0.799	1.293
Urban female high-skilled	0.946	1.102	1.565
Change in non-labour factor returns (%)			
Land	1.338	1.501	1.662
Mobile capital	0.689	0.813	0.96
Fixed capital (average)	-4.513	-4.359	-4.206
Change in unskilled labour supply (%)	0*	0*	0.228

* fixed at zero by assumption

Table 19: Poverty and income distribution effects of capital growth in export manufacturing

	Baseline	Labour market assumptions		
		No migration, fixed total supply of each labour type	Migration, fixed total supply of each labour type	Migration, flexible supply of unskilled, fixed supplies of skilled labour
Per capita income (VND*106)		Percentage change from baseline		
Country	499	0.65	0.81	0.91
Urban	805	0.88	0.93	1.13
Rural	393	0.48	0.73	0.75
Poverty rate (Headcount, %)				
Country	19.10%	-0.6	-1.9	-1.3
Urban	11.30%	-2.3	-2.9	-3.1
Rural	21.80%	-0.8	-1.5	-1.5
Inequality (Gini coefficient)				
Country	0.404	0.223	0.198	0.248
Urban	0.378	0	0.053	0.079
Rural	0.355	0.028	0.056	0
Urban female high-skilled		0.946	1.102	1.565
Change in non-labour factor returns (%)				
Land		1.338	1.501	1.662
Mobile capital		0.689	0.813	0.96
Fixed capital (average)		-4.513	-4.359	-4.206
Change in unskilled labour supply (%)		0*	0*	0.228

4.4. Discussion

These experiments with an economy-wide general equilibrium model help us to understand and to quantify labour mobility issues in the context of economic growth. The contrasts between results across the three closures reveal that in Vietnam, the labour market is one of the most important conduits for distributing the gains from growth, even when the growth itself takes place in specific locations and industries (in our experiment, in urban-based manufacturing).

The counterfactual closure 1, with no mobility from rural to urban areas, shows how the gains from growth are concentrated when labour cannot move. GDP increases, but national poverty declines only slightly, and urban-rural wage and income gaps become substantially wider. These results are reminiscent of many features of the contemporary Chinese experience, where policy instruments (the hukou and others) have been deployed to maintain a persistent segmentation of urban and rural labour markets.

The second and third closures underline both the complementarity of growth with labour mobility, and also the function of labour mobility as a channel for spreading the gains from globalization and growth. Free labour mobility ensures faster overall growth, and also a much broader distribution of the gains. One implication of this contrasting set of results is that when labour mobility is high, the demand for public policies to redress urban-rural inequality of income and opportunity becomes smaller. China's "Go West" policies, pumping massive quantities of public investment into inland provinces, are in part compensation for the continuing segmentation of its internal labour market. More positively, the results of this experiment suggest that in Vietnam, careful attention to the requirements for urban-based industrial growth may substantially reduce the price tag of rural development strategies consistent with social goals of growth, poverty alleviation and equity. Urban and rural development expenditures need not be a zero-sum game.

5. RECOMMENDATIONS FOR LABOUR AND URBANIZATION POLICIES TO 2020

In the first two decades of *doi moi* the Vietnamese economy rebounded from the low growth performance of the post-war command economy era. But many of the reforms and consequent growth dividends were associated with the transition to a market-based economy, rather than inherent features of such an economy. This raises the question of what will sustain growth into the future, and what policies will best support that growth. Alongside this question is a second, equity-related one: what will be required to ensure that growth is robustly pro-poor, i.e. that it sustains welfare improvement among the poorest and less privileged members of society?

5.1. Medium-term strategy: support employment growth

For a developing country such as Vietnam in which poverty and low income remain major concerns, solving the issue of unemployment and underemployment has to be the first priority. This means that Vietnam must continue to encourage the growth of labour-intensive industries, especially those tradable industries in which it can hope to capture or gain global market share. This was the strategy successfully pursued by the NIEs and some Southeast Asian countries during comparable periods in their own development. It should also create and strengthen conditions favorable to the growth of private sector firms and especially SMEs, even those in the informal sector and services, because this is where the majority of the jobs are created. Vigorous development of the agricultural and rural economies, where half the labour force is currently located, is also central.²⁶ In 2011-20, creating jobs at a rate sufficient to maintain employment is the first, and most pressing, task of development policy in Vietnam.

Fortunately, since unskilled and semi-skilled labour is a primary income source for the poor, any strategy targeting rapid employment growth is also most likely also to be strongly pro-poor. The prospect of growth with strong linkages to the poor further strengthens the case for a labour-intensive strategy.

What policies, or policy reforms, are necessary to promote labour-intensive growth? To accelerate labour demand growth requires a supporting macroeconomic environment, plus sectoral and factor market policies that encourage labour-intensive expansion by industry. To ensure its success requires policies to facilitate the movement of labour to industries and locations where jobs are being created. Currently, successful job creation and labour mobility are constrained by a combination of market failures requiring government interventions and existing policies that should be relaxed or reformed.

Supporting macroeconomic environment. As shown in Figure 27 and discussed in section 3, the macroeconomic conditions needed to encourage investment and

²⁶For more on agricultural and rural development see SEDS Paper No.7, on agricultural modernization and rural development.

innovation, and to ensure that these are relatively labour-intensive in nature, are wide-ranging. On the whole, Vietnam has performed increasingly creditably in these areas. Trade and investment policy reforms in the lead-up to WTO accession in 2007, plus a generally credible exchange rate policy have encouraged substantial inflows of FDI and discouraged domestic capital flight. Over time, these reforms have also begun to shift the emphasis of new investment away from capital-intensive heavy industry projects, mainly undertaken as joint ventures with SOEs, toward labour-intensive assembly and light manufacturing, either wholly foreign-owned or in partnerships with domestic SMEs (Athukorala and Tran 2008). The gains of these reforms are threatened by the global financial crisis, which has substantially reduced external demand for Vietnam's manufactured output, and by ongoing difficulty in controlling domestic inflation. To sustain a stable macroeconomy will require coordinated monetary and fiscal policy actions by the government and the State Bank of Vietnam. It will also place a high premium on the efficient and non-inflationary use of public expenditures, whether in any new stimulus packages or in long-term development policy.

Sectoral and factor market policies. Policies applying to individual industries or factor markets must support the expansion of labour-intensive activities, especially in tradable (export-oriented or import-competing) areas. Once again, WTO accession has removed many of the most distorting features of Vietnam's trade policy regime, which previously conferred disproportionate benefits on capital-intensive industries (in practice, SOEs). These distortions persist in somewhat diluted form, both in the residual trade policy measures and, importantly, in capital subsidies and the regulatory treatment of SOEs versus private sector enterprises (Athukorala 2006). Capital subsidies to SOEs and their "equitized" successors (which are in practice mainly still state-owned) have two consequences for employment: they crowd out domestic and foreign investment in more labour-intensive, export-oriented industries, and they intensify competition for other scarce resources, most notably skilled workers. Higher costs of physical and human capital reduce profitability in labour-intensive industries. In addition, to the extent that favoured treatment for SOEs gives them quasi-monopoly status, especially in domestic markets for inputs such as construction materials, their exploitation of this position further adds to the costs of private-sector initiatives. China's open-door policies and its integration into the global economy required a heroic act of political will in which the SOE-dominated industries were sacrificed for the greater good of employment generation and international competitiveness of labour-intensive industries. Vietnam now faces a similar task. If it is to retain privileged sectors, then the government must calculate the cost in terms of growth opportunities foregone-and distributional inequity made worse-by their retention.

Policies to promote labour mobility. The creation of new jobs has no impact on growth or poverty if workers cannot take advantage of them. Because most new investments are concentrated in cities, policies must support both the occupational and the spatial mobility of labour. Workers must be given opportunities to move out of rural areas and agriculture, and into urban or periurban areas and industry or services.

A large part of current development policy in Vietnam appears oriented to helping workers to stay in rural areas and agriculture, for example through in situ vocational

training programs. However, the success of such policies is in doubt; after a burst of growth in the 1990s, agriculture has fallen far behind the rest of the economy both in overall growth and in growth of employment. Meanwhile, many workers remain in the sector or in rural areas, effectively trapped in jobs that are far less rewarding, and generate far less incomes, than jobs they could potentially occupy in other areas and industries (for details, see SEDS paper no.7, on agricultural and rural development). Increasing labour mobility requires providing rural workers with greater freedom to move to where their labour commands a higher price and generates more value.

Under current law, it is difficult to collateralize or sell agricultural land, and this is a constraint to labour mobility as it prevents some farmers from converting their wealth into another form of capital (such as education) and exiting agriculture. The land laws also sustain a highly fragmented farming system (Kompas et al., 2009), which lowers productivity and thus further reduces the growth of rural savings for investment in human capital or migration (Ravallion and Vandewalle 2008). Continued liberalization of land laws is one clear area where reforms are strongly complementary with growth, both of the rural and the urban economies.

Closely related to land is credit. Migration is costly, as is changing occupations for many rural inhabitants. Access to credit to cover up-front costs is a prerequisite to the move. Rural credit systems in Vietnam are rudimentary by regional standards; a promising area for policy reform is to consider sponsoring or permitting the expansion of a variety of microfinance and revolving credit systems. These have been shown in many developing countries to be effective mechanisms for mobilizing rural savings and promoting productivity-enhancing investments.

Vocational training is important as a means to assist workers to relocate. However, the current system of public-sector training seems to be oriented less toward producing more skilled workers than to the achievement of other, perhaps non-economic goals. The “million farmer” training program currently being implemented appears to have been designed without substantial consultation with its ultimate clients (employers); informally, many employers regard such government-run training schemes as virtually useless or even worse. The experience of Vietnam’s Asian neighbors is that successful vocational training programs are undertaken in partnership with industry, a structure that ensures not only adequate and appropriate training, but also encourages cost sharing by the private sector. In this way, more and better training could be delivered at lower cost than the current scheme.

At the other end of the occupational and spatial mobility line are urban areas. Vietnam’s urbanization is proceeding apace, but the cities themselves are underinvested and unprepared for large migrant influxes. This is generating great stress on existing urban infrastructure and service delivery, which risks driving up business costs and thus destroying jobs or opportunities for growth. In this respect, Jakarta is a model that Ho Chi Minh City should not follow. The greater the cost of finding and moving to new urban residences, the lower the migration that occurs; underdeveloped and congested urban areas are thus another form of constraint on labour mobility. This is made worse by the persistence (where it does) of residence-based barriers restricting

migrants' access to schools, clinics, and other social services. Vietnam has to decide, soon, that as Ho Chi Minh City (and perhaps Hanoi) are going to become megacities, then they should be provided with the financial and planning resources necessary to grow in a managed way, delivering social and economic benefits rather than suffering from costly and disruptive congestion, pollution, sprawl, and haphazard development. This may require reorienting the current system of fiscal transfers among subnational units (Kim Ninh and Vo Thi Thanh 2009).

In sum, the medium-term goal for Vietnam is to create and sustain a high rate of job growth and to help ensure that workers can make themselves available for the jobs that are offered. In support of this some activist policy reforms are necessary (urban infrastructure; vocational training partnerships; supporting new rural credit institutions). But other policy reforms require a relaxation of current settings, in particular land laws that constrain labour mobility, and preferential treatment for SOEs that constrain industrial labour demand growth. The SEDS 2011-20 should address each of these as a matter of the highest priority.

5.2. Long-term strategy: build skills and cities

After employment creation, the second overwhelming lesson from comparative experience is the need to plan, and create, an adequate human capital base ahead of demand. So while medium-term policy for 2011-20 must focus on jobs, this emphasis must not neglect the longer-term need for highly skilled workers. The positive experience of the NIEs, and the negative experiences of Thailand and Indonesia, make this clear as a policy priority.

As described in section 1.2, medium-run economic expansion is driven by two forms of labour productivity growth: that from higher output per worker in each sector, and that due to the transfer of workers from lower to higher productivity occupations. In the course of the transition from low income to middle income status there is a great deal of aggregate productivity growth to be gained by the movement of workers out of low-return occupations and into jobs with high output per worker – often, if not always, in urban areas. This has been a primary source of growth in Vietnam during the transition from command to market economy.

However, transfers of workers among sectors are part of a transitional shift in economic structure, not a long-term phenomenon. As that transition is completed, further rises in output per worker require dedicated investments at industry and sector level. These are the mainsprings of long-run growth, both in the Lewis model (see section 1) and in the real world. A country that fails to promote and sustain growth in output per worker, risks falling into a 'lower-middle income trap' in which firms do not innovate or invest because there are not enough skilled workers, while workers do not acquire education or training beyond a basic level because there is insufficient domestic demand for skills. This is a coordination failure problem, and as such cannot be solved by private actors alone. It requires policy action. The government has a mandate to use development policy to help avoid the trap by investing in a skilled labour force. In Vietnam, this is the priority for long-run development policy.

The logic of the development process leads to a chronological sequencing of development policies: first solve unemployment and promote occupational and spatial labour mobility, and then plan for the future by supporting education, skills accumulation, and investments by firms that will create jobs for skilled workers. But as we saw in section 2, the experience of the most successful East Asian economies (and the counter-examples of Thailand's late 1990s crisis and the pronounced slowdown of the Indonesian economy) suggests very strongly that human capital investments must begin well before the demand for skilled workers becomes a constraint on growth. Enhancing the mobility of labour up the skills ladder must therefore begin early, in order that potential investors can perceive the scope for adequate returns on skill-demanding capital investments.

Vietnam has already begun to fall behind the regional curve for skills acquisition (figures 17-18), which is surprising for a country that so evidently places high value on learning. This is despite substantial investments and ODA support for vocational training programs. A recent diagnosis suggests that much of the money spent in this way has not been efficiently used:

[The] fundamental problems lie not in the number of workers with professional qualification, but the fact that graduates of technical and vocational education and training (TVET) programs do not have the basic knowledge and enterprise skills required. In particular, FDI enterprises do not have high regard for the quality of existing TVET programs. These enterprises often say that they have hardly benefited from recruiting TVET graduates to improve factory operations. Moreover, some FDI enterprises say that they have to retrain these graduates after recruitment because their skills and knowledge are far below the required level. According to a MOLISA's report, 44% of FDI enterprises have had to organize re-training courses for their employees, and 25% of TVET graduates did not satisfy the skill and knowledge requirements in FDI enterprises... Several of the enterprises mention that they even prefer to recruit fresh workers and train them from the beginning rather than recruit TVET graduates who have got undesirable habits. The government often focuses on the number of training institutions or graduates, which is at odds with the desire of enterprises for improvements in the quality of TVET programs (Mori et al, 2009:12).

This analysis points strongly toward the need for Vietnam to reconsider current vocational training programs. These are costly drains on the public budget, and if they do not result in skilled, employable workers then they are a waste of scarce resources. The successful model of skills acquisition is not for government to "go it alone", but to form partnerships with industry that raise educational productivity, stimulate counterpart private investments, and reduce costs all around.

It may be argued that vocational training programs as currently designed serve more than one purpose; that in addition to providing training opportunities, the location of these programs (as a priority, in disadvantaged districts and provinces) also helps to redress inequities in income and opportunity. If so, this strategy exemplifies the common "two targets, one instrument" problem. Locating a poorly designed vocational training program in a disadvantaged area serves neither the goal of skills acquisition

nor that of reducing inequality or poverty. Separate policies should focus on one goal or the other: a well-designed training program regardless of location, and a targeted program of transfers or subsidies to assist the populations of disadvantaged areas to acquire skills and opportunities. The Vietnamese government should reevaluate its current vocational training programs with the goal of making them more focused on their core goals, more responsive to industry demands, and thus more likely to attract counterpart funding, both from trainees (in the form of tuition payments) and from their potential employers.

Finally, the investment of public resources in increasing the supply of skills will pay off for society only if rewarding jobs exist. As with the job creation problem, city development is clearly a vital component of this strategy. Cities house concentrations of skill-intensive industries, and the agglomeration of such industries in a central place is known to further enhance output per worker through information spillovers across firms and workers. If cities are costly, congested and lacking in basic services, firms will be reluctant to make investments and skilled workers will have incentives to seek more productive employment, and more satisfying living conditions, elsewhere – including overseas. A well-financed, carefully planned urban development strategy, like so many other policies, is indirectly also a labour market development policy.

5.3. Summary

In summary, we advise that in 2011-20 the Vietnamese government pursue the following strategies:

1. Adopt policies aimed directly at eliminating the labour surplus. Encourage labour-intensive industries, promote SMEs, self-employed workers/households and the informal sector. As a vital component of employment creation, ensure that potentially mobile workers have every chance to learn of, and take advantage of, opportunities in other occupations and locations.
2. Be fully committed to the investment and development of human capital to create a supply of skilled labour that is ahead of demand, with the goal of creating fertile conditions for more skill-intensive capital investments and technologies.

In implementing these strategies, the Vietnamese government must maintain the five features which allowed the NIEs and successful SEA economies to grow with equity. We listed and discussed these features in detail in section 2.5. It suffices to briefly restate here that employment growth must be inclusive, investments in human capital must be timely and equal, labour mobility must be fluid, discriminations among different types of enterprises must be removed, and urban infrastructure must be adequate.

We believe that by pursuing the above strategies and by abandoning policies that inhibit their realization, Vietnam will be able not only to generate employment growth, but also to improve labour productivity and transfer this productivity improvement into increases in wages and demand. This will allow the triple goal of full, productive and equal employment to be realized.

As a late starter on development, Vietnam can look to the experience of other countries in the region, both to learn from success and to avoid mistakes.²⁷

Finally, it is of great importance to stress that the task of labour market development, promotion of labour mobility, and skills upgrading is too big to be left only to a subset of government agencies, or even to government as a whole. Development policies must be broadly coordinated across government agencies if sectoral labour policies are to be effective. And responsibility for improving labour mobility, including the acquisition of skills, must be shared with employers, i.e., the private sector, representing the demand side of the market. Only by means of such partnerships can Vietnam hope to achieve cost-effective employment growth and skills upgrading.

²⁷Appendix 3 provides further discussion of how various successful countries implemented their growth, employment, and human development strategies.

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Appendix 1: Inception mission interviews

Date	Institution	Interviewees
8/24	Vietnam Economics Association	Dr. Nguyen Quang Thai, VEA; Dr. Nguyen Van Thanh, DSI
8/25	Centre for Analysis and Forecasting, Vietnam Academy of Social Sciences	Dr. Nguyen Thang, Director Ms. Nguyen Thi Thu Hang
8/25	Center for Economic Policy Research, Vietnam National University	Dr. Nguyen Duc Thanh, Director; Drs. Pham Tuyet Mai, Nguyen Thi Thu Hang and Dinh Tuan Minh
8/26	IPSARD, Ministry of Agriculture and Rural Development	Dr. Dang Kim Son, Director
8/26	World Bank	Dr. Doan Hong Quang
8/27	Central Institute for Economic Management, Ministry of Planning and Investment	Dr. Chu Tien Quang
8/27	ILSSA, Ministry of Labour, Invalids and Social Affairs	Dr. Nguyen Ba Ngoc Mr. Luu Quang Tuan
8/28	International Labour Office	Dr. RieKjeldgaard, Director Ms. Phan Thi Thu Huong
8/31	Fulbright School	Dr. Vu Thanh Tu Anh Mr. Nguyen Xuan Thanh
8/31	HCMC Inst. Devel. Stud.	Mr. Le Van Thanh
9/1	An Giang University	Dr. Vo Tong Xuan

Appendix 2: Comparative levels of living: Vietnam and selected countries

	1960	1970	1975	1980	1985	1990	1995	2000	2005	Latest
GDP per capita (constant 2000 US\$)										
China	105	122	146	186	290	392	658	949	1,452	1,963
Indonesia	196	235	303	397	474	612	827	800	943	1,083
Malaysia	815	1,145	1,431	1,919	2,161	2,608	3,604	4,030	4,609	5,155
Philippines	612	732	843	989	811	901	895	977	1,106	1,225
Thailand	317	516	601	789	925	1,400	1,995	1,968	2,387	2,645
Vietnam					202	227	305	402	539	647
GDP per capita, PPP (constant 2005 international \$)										
China				523	813	1,099	1,847	2,664	4,076	5,511
Indonesia				1,345	1,609	2,077	2,805	2,714	3,197	3,674
Malaysia				4,891	5,508	6,646	9,185	10,271	11,746	13,139
Philippines				2,618	2,147	2,385	2,368	2,587	2,927	3,244
Thailand				2,123	2,489	3,769	5,371	5,298	6,424	7,120
Vietnam					803	902	1,214	1,597	2,143	2,574
Human Development Index (HDI)										
China				0.533	0.556	0.608	0.657	0.719	0.756	0.772
	1960	1970	1975	1980	1985	1990	1995	2000	2005	Latest
Indonesia				0.522	0.562	0.624	0.658	0.673	0.723	0.734
Malaysia				0.666	0.689	0.737	0.767	0.797	0.821	0.829
Philippines				0.652	0.651	0.697	0.713	0.726	0.744	0.751
Thailand				0.658	0.684	0.706	0.727	0.753	0.777	0.783
Vietnam					0.561	0.599	0.647	0.690	0.715	0.725

Sources: (GDP per capita): World Bank, World Development Indicators Online, (HDI): UNDP.

Notes: (1) HDI is a composite measure that combines normalized measures of life expectancy, educational attainment, and GDP per capita. (2) Latest year for GDP per capita: 2008. Latest year for HDI: 2007. (3) Numbers in bold are less than or equal to corresponding data for Vietnam in 1995.

Appendix 3: Country-specific examples

A3.1. South Korea

Human development strategy: Having concentrated on expanding primary school education during the 1950s, the country shifted its focus on vocational secondary schools during the 1960s and 1970s, then further stepping up its effort in developing human resources in the 1980s and 1990s²⁸. Four main features of South Korea's vocation and education training program contributed to its success. First, there is a great emphasis on the "employability" of trained workers. Second, appropriate financial funds were given either by the government or by levying the employers. Third, there is involvement of both the private sector and foreign assistance. Foreign assistance, both financially and technically, also contributed to the establishment of public training centers. In the late 1970s, South Korea introduced a law imposing firms to train their employees. Failure to do so would result in fees, which are collected by the Vocational Training Promotion Fund established in 1976. This policy reflects the government's recognition of a typical market failure that the skill of the labour force is a public good and hence firms tend to under-invest in human capital; that is, firms would not voluntarily invest sufficiently in employees' education and training and would rather "poach" trained employees from other firms or in the open market. Involvement of the private also meant more funds available for training.

Fourth and finally, the government responded timely to changes in the economic environment, correcting market failures as they arise. For example, although the policy of requiring firms to train their employees tended to serve the country well, it was recognized by the 1990s that there was over-emphasis on training of basic skills to enhance employability and under-emphasis on upgrading the technical knowledge and skills of existing employees (Kang et al 2001). As a result, in 1997 the government passed the Act Promoting Workers' Vocational Training, establishing a system of vocational competency development and encourages enterprises (through financial support) to provide further training for their employees on a voluntary basis. The act removed restrictions on in-plant training, encouraging voluntary training, demand-oriented training, and job competency training for the employed.

Employment creation strategy: Vietnam can learn much from South Korea's policy response to rising unemployment due to the 1997-98 Asian financial crisis. The government centered its efforts on creating a favorable environment for the private sector to create jobs (Kang et al 2001). In particular, the government:

- Provide necessary infrastructure (such as business management consulting resources and start-up information)
- Increased the number of small business support centers and business "incubators" to help support the start-up of small and medium-size enterprises and venture enterprises with high potential for employment
- Supported service industries such as tourism that have high job creation potential
- Increased investment in social overhead capital and extending housing construction projects

²⁸ In 1973, the National Technical Qualification Law put in place a system of skill certification. In 1982 the Ministry of Labour founded the Korean Manpower Agency as its training arm. In 1989 the Korea Institute for Technology and Education was established to provide teacher-training programs for the vocational training centers (Kang et al 2001).

Employment services and labour market information: interestingly, when it comes to employment services, South Korea offers lessons on what not to do. The South Korean government neglected employment services until the financial crisis (Kang et al 2001). In response to the rising unemployment during the crisis, the government expanded public employment service agencies and created a nationwide network for job information. The public employment service agencies not only provide information on the job vacancy but also information on vocational training, as well as information on unemployment benefits. In May 1999, the government launched an electronic labour exchange system, Work Net, using Canada's WorkInfoNet as a standard. Due to such measures, the number of job seekers using the public employment system jumped dramatically, and so did the number of job vacancies posted with public services. However, the effectiveness of these services is still in question. The number of agencies and counselors are insufficient. Statistics show that only 5.8 percent of the unemployed found jobs through the public employment services. Most workers still find traditional methods such as friends/relatives and direct contacts to be more effective. The public employment services seem to fail to provide updated and needed information. This become clear when Work-Net is compared with labour market information systems in other countries (Kang et al 2001).

System of social safety net: there are several components to this system in South Korea: employment insurance, public work projects, and temporary livelihood protection. Instead of having a regular system of unemployment insurance which has the tendency to reduce workers' motivation to seek employment, South Korea has an employment insurance scheme that serves two purposes: (i) the scheme would offer unemployment benefits as usual; (ii) the scheme also offers workers the chance to upgrade their job skills. That is, the scheme combines traditional unemployment benefits and active labour market programs (Kang et al 2001). Similarly, the public work projects in South Korea play dual roles: to create jobs and to act as a social safety net for the unemployed. The latter role is based on the principle that temporary job opportunities for the unemployed in the public sector help maintain basic livelihood of unemployed families. And finally, the temporary livelihood protection program is designed to serve not the unemployed but the poor in general, especially those that are incapable of working such as the elderly and the disable. The program is a combination of direct income support and subsidizing vocational training and education or low interest rate loans. Obviously the coverage and generosity of such a program is limited by the availability of fund.

Promotion of SMEs: South Korea began to actively develop its SMEs in the late 1970s. Various measures were used: simplifying requirements for starting a new business, providing starter funds, introducing tax reduction or exemptions at the start-up stage, providing advice on marketing plans and business feasibility (Li and Luo 2008). The government also amended the financial law, fair trade law, and commercial law to create a level playing field for SMEs against large enterprises. A large amount of resources were spent to promote the technical exchanges between SMES and large enterprises. Funds were established to provide financial support. The Special Banking Law was enacted to banks responsible for SMEs' financial transactions, requiring several large banks to have a certain proportion of their loans to be provided to SMEs.

A3.2. Singapore

The human development strategy of Singapore is also one that Vietnam can learn from. In Singapore, the government established a National Productivity Board in 1972, whose primary purpose is to raise the productivity of the labour force, by fostering vocational training and good industrial relations. A number of training centers was also established in the early 1970s with the assistance of foreign capital and technical support (Inagami 1998).²⁹ In 1979, the Skills Development Fund was set up to help subsidize education and training of relatively low-paid workers. The money for the fund was collected from employers of these same workers. In the same year 1979, the Committee on Professional and Technical Education and the Vocational and Industrial Training Board were also established. The former is the planning body for specialists, technical and skilled labour, while the later is responsible for the skill development for workers who had completed secondary school. All these measures demonstrate the commitment of the Singaporean government in pursuing its objective of upgrading the skill of the labour force. Note also that the Singaporean government shares a similar view with the South Korean government regarding firms' responsibility to provide education and training to their employees. While the South Korea government directly imposes the training requirement onto firms, the Singaporean government provided the training but used employers' money.

Singapore also established the National Wage Council, which incorporate leaders from government, unions and management. The NWC gave recommendations regarding both wages and labour market policies to the government, which were not legally binding but carried important weight.

A3.3. Malaysia

Human development strategy: while Malaysia had always paid much attention to education and training, the country did not focus on vocational training until mid-1980s under the Fifth Malaysia plan 1985-1990 (Mansor et al 2001). This was in response to the rising shortage of skilled labour as the country approached the Lewis turning point (early 1990s) and to support the country's transit to a more industrial and technology-based economy. Various new vocational and technical schools and educational institutions were established, while existing ones were expanded and reformed. Traditionally, most of the reforms involved public bodies. Unlike South Korea and Singapore where the government shifts part of the education and training responsibility to firms, in Malaysia, this task was traditionally carried out by the government and public training organizations. However, the private sector including foreign firms gradually took on larger role starting in the early 1990s. There was a strong element of learning from the Singaporean experience. Similar to Singapore and South Korea, Malaysia also brought in foreign assistance, such as Germany or Japan, in its human resource development. The Human Resources Development Law of 1992 is similar to the Singapore's SDF, which

²⁹Some examples include: the Philips Government Training Centre with technical assistance from Philips Singapore; the Tata Government Training Centre with the cooperation of India's Tata Corporation and the Brown Boveri Government Training Centre with help from Brown Boveri of West Germany; Japan-Singapore Technical Institute with the help of the Japanese government (xxx).

requires firms to contribute money to a fund used for employees' training. The Private Higher Education Institutions Act of 1996 allowed the establishment of degree-granting institutions owned by private firms, as well as the setting-up of "branch campuses" by foreign universities (Inagami 1998).

While vocational and educational training is generally successful in Malaysia, there are several shortcomings. There is a lack of effective coordination at the national level and haphazard planning that leads to duplications in curricula and certification (Mansor et al 2001). Public institutions offer similar courses in a few areas and cover a limited range of skills. This suggests that they are unable to identify market trends and offer courses relevant to them. There is also lack of timely and relevant information about the human resource requirements of industries and the state of the labour market. In addition, the quality of the training provided by the public institutions has also been questioned and is said to be not market driven. Collaboration between public-sector training institutions and industry is needed to correct this problem.

Social safety net: Malaysia does not have unemployment insurance or any direct income support for the unemployed. However, there is a compulsory saving scheme, the Employees Provident Fund (EPF) which is financed directly by monthly contributions from both employers and employees. Employees can withdraw their outstanding deposits (amount varies by circumstances) when they have reached retirement age, when they lose a job, become disabled, intend to emigrate, etc. In addition, the Malaysian government supports the poor through promotion of the informal sector (small and medium enterprises), where workers turn to when they cannot find jobs in the formal sector. The Amanah Ikhtiar Malaysia is a government fund aimed at helping the poorest in setting up small businesses. The Yayasan Tekun Nasional is another program designed to assist petty traders and informal workers. These programs help unemployed workers maintain income, especially during the Asian financial crisis. However, their limited scope means that they are not adequate as a cushion against such big shocks such as the financial crisis.

Ministry of Planning and Investment
Development Strategy Institute
65 Van Mieu, Dong Da, Hanoi
Phone: +84-4-3843 1848 / 3747 5334
Fax: +84-4- 3845 2209 / 3747 5334
E-mail: clpt@mpi.gov.vn
project50577.vn@undppartners.org
Web: dsi.mpi.gov.vn

United Nations Development Programme
Poverty and Social Development Cluster
25-29 Phan Boi Chau, Hanoi
Phone: +84-4-3942 1495, ext. 281
Fax: +84-4-3942 2267
E-mail: registry.vn@undp.org
Web: www.undp.org.vn