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ABBREVIATIONS

AGM	Annual General Meeting
AIGO	ASEAN Industrial Cooperation Scheme
AMC	Asset Management Companies
ASEAN	Association of Southeast Asian Nations
BOI	Board of Investment
BOT	Bank of Thailand
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BMA	Bond Market Association
CDRAC	Corporate Debt Restructuring Advisory Committee
CEP	Closer Economic Partnership
CIPC	Credit Information Protection Committee
CPI	Consumer Price Index
DIT	Department of Internal Trade
DOT	Direction of Trade
MEA	Metropolitan Electricity Authority
EPPO	Energy Policy and Planning Office
EU	European Union
EXIM Bank	Export-Import Bank
FDI	Foreign Direct Investments
FIDF	Financial Institutions Development Fund
FPO	Fiscal Policy Office
FSMP	Financial Sector Master Plan
FTA	Free Trade Agreements
FY	Fiscal Year
GCC	Gulf Cooperation Council
GCS	Government Counter Services
GDP	Gross Domestic Product
GFMS	Government Fiscal Management Information System
GFS	Government Financial Statistics
GSP	Generalized System of Preferences
ICT	Information and Communications Technology
JTEPA	Japan-Thailand Economic Partnership Agreement
MOC	Ministry of Commerce
MLR	Minimum Lending Rates
NCB	National Credit Bureau
NESDB	National Economic and Social Development Board
NSO	National Statistics Office
NTC	National Telecommunications Commission

OECD	Organization for Economic Cooperation and Development
OPDC	Office of Public Development Commission
PPI	Producer Price Index
PPP	Private Public Partnership
PSA	Public Service Account
ROA	Return on Asset
ROCE	Return on Capital Employed
ROE	Return on Equity
SDUs	Service Delivery Units
SEA	Securities and Exchange Commission Act
SEC	Securities Exchange Commission
SEFF	Small Exporters Financing Facilities
SES	Socio-Economic Survey
SET	Stock Exchange of Thailand
SFIs	Specialized Financial Institutions
SMEs	Small and Medium Enterprises
TDRI	Thailand Development Research Institute
TFEX	Thailand Future Exchange
TFP	Total Factor Productivity
TSD	Thailand Security Depository Company
TVQI	Thai Vocational Qualifications Institute
UTCC	University of the Thai Chamber of Commerce
VEC	Vocational Education Commission
WB	World Bank
WTA	World Trade Atlas
WS	Wholesale Price
yoy	Year-on-Year

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SECTION 1

OVERVIEW

Thailand's economic growth of 4.5 percent this year, the same as last year's, is a large drop from the 6 percent that was averaged in the 2002-04 period. This is largely due to depressed domestic demand, as the Thai economy adjusted to high energy prices, rising interest rates and political uncertainties. Only significantly stronger growth in exports, resulting from faster global growth in 2006, averted further reductions in the growth of real GDP.

Poverty incidence has fallen significantly between 2000 and 2004 and there has been further reduction in 2005. However, it is also true that as growth slows, the rate reduction in the number of poor in Thailand slows too.

Growth in 2007 is projected at 4.6 percent, with a large upside potential if the Government takes a few quick policy initiatives supportive of the private sector. Domestic demand is expected to do better as world oil prices ease, inflation starts to come down and interest rates follow inflation. But the rise in domestic demand will be limited without substantial improvements in consumer and investor confidence, which has improved only slightly since mid-September this year. However, few key policy initiatives like the signing of the Thailand-Japan FTA, simplification of regulations for businesses including clarity on foreign ownership rules and rationalization of price controls, passage of financial sector laws as well as speeding up of public infrastructure investments could provide the much-needed boost in confidence and realize the upside potential. Export growth on the other hand will be lower than in 2006 as US and Japanese growth slows and world trade growth falls from 9.7 percent this year to 7.3 percent next year.

Thailand's growth has slowed from an average of 6 percent in 2002-04 to 4.5

percent in 2005-07 mainly due to weak private investment and productivity growth. The challenge during recovery was to restore confidence and stimulate demand to use the excess capacity created immediately after the crisis. But as capacity utilization reached pre-crisis levels, the challenge became one of ensuring rates of private investment that could expand capacity as well as raise productivity growth. This required the Government to adopt measures that would promote private investment and productivity growth by keeping up competitive pressures on firms, reducing costs and raising rates of return on investment. While trade policies have made Thailand more open, policies to address domestic constraints to private investment have been coming slowly. Higher oil prices, higher interest rates and real appreciation have only aggravated these constraints.

Total factor productivity (TFP) growth has contributed little to Thailand's growth over the last 30 years and currently lags those of its competitors. Most of the country's growth has come from a sustained rapid expansion of capital and labor inputs as well as improvements in average years of education of its labor. There has been negligible productivity growth *within* sectors like manufacturing or services; whatever aggregate total factor productivity growth there has been (i.e. recently estimated at 1.6 percent per year during the 1977-96 period) has come from the *reallocation of labor* from lower-productivity agriculture to higher-productivity manufacturing sector. But as the scope of such reallocation of surplus agricultural labor and of additions to average years of education narrows, more of Thailand's growth has to come from *within-sector* TFP growth, and that will require more innovation and value-addition. Accelerated development of labor force skills—through improved vocational, secondary and tertiary education—as well as

removal of infrastructure bottlenecks to lower costs of agglomeration—will be critical.

Export growth will be slower in 2007 reflecting mainly the global slowdown, but there are also serious medium-term concerns about sustaining strong export growth. Exports grew in 2006 by 9 percent in volume and 18 percent in value terms with non-electrical machinery and parts (HS84), electrical machinery and equipment (HS85), and vehicles and parts (HS87) being the three fastest growers. Though the main markets remain the US, Japan, and the EU, growth in exports to East Asia, especially China, have been much faster than to the rest of the world. The expiration of the US's Generalized System of Preferences (GSP) for Thailand, the stalling of FTA negotiations with many countries, and the US slowdown will depress exports in the short-term. Though Thailand raised its export share of GDP from 42 percent in 1996 to 67 percent in 2005, this growth would be difficult to sustain in the face of very intense competition from *lower-income* countries like Vietnam, India and China in both labor-intensive goods and more technologically intensive goods. With their wage costs for engineers and skilled production workers a fraction of Thailand's, Thailand will have to make special efforts to sustain strong export growth rates in the post-recovery period.

The recently completed tenth National Economic and Social Development Plan emphasizes the need to move towards a knowledge economy to boost productivity growth and export competitiveness. This will call for accelerated development of skills of the Thai labor force—strengthening of delivery of vocational, secondary and tertiary educational services—so that Thailand's skill-level is higher than countries of comparable income-levels. Accelerated regional integration through production networks is already expanding competitive pressures on exporting firms to specialize and reap economies of scale. Firms supplying the domestic market must be exposed to greater competitive pressures too so that they have

incentives to innovate for profit and the need to hire skilled labor and invest in research and development (R&D)—something that is still weak for domestic-market oriented manufacturing firms as well as in service sector firms. The Government may also want to choose a few sub-sectors for special investments as it is beginning to do in automobiles, electronics and fashion.

Thailand plans to meet this challenge of innovation, competition and specialization effectively. But success in meeting this challenge will have distributional impact which will need to be managed. Inequality in Thailand, which appears to have been capped during the recovery period, has potential to rise as agglomeration economies in specific areas accentuate regional and interpersonal inequalities not just in terms of income levels, but also in terms of schooling and access to basic services. The poorest North-East region has clearly benefited recently, although per capita public spending there remains low and the region is insufficiently integrated. In short, despite successful global and regional integration, many East Asian countries including Thailand are falling behind in domestic integration. The challenge of domestic integration can be met by addressing problems of rapid urbanization, service delivery, social protection and social cohesion—a new emerging agenda in Thailand's Tenth Plan.

On the other hand, private investment continues to falter. It grew by only 4.6 percent this year—the lowest rate after 2001—and is likely to be only slightly higher next year. Though FDI has continued to be robust, domestic private investment has slackened further. Political uncertainties, especially relating to public infrastructure investments, foreign ownership issues and trade agreements continues to dampen investor-confidence. Over 1,300 firms told the Government¹ that reductions in regulatory burden, improvements

¹ The survey was conducted in 2004-05 as a part of the *Thailand Investment Climate, Firm Competitiveness and Growth (2006)*, a joint report of the World Bank and the National Economic & Social Development Board (NESDB).

in infrastructure and accelerated skill development were urgently needed to reduce costs and raise productivity so that Thailand could invest and raise productivity.

High oil prices, and resulting high energy prices, have raised costs of production, reduced manufacturing output growth and dampened private investment. Thailand's oil dependence is one of the highest in the region, and the transport sector most oil dependant among the sectors. The weighted average price of energy (electricity, fuel oil and high-speed diesel) has risen 41 percent this year on top of 33 percent last year, while petrol prices have more than doubled relative to 2002. Thus, firms in various sectors have to adjust their energy intensity to varying degrees affecting output growth, prices and investment. And this adjustment takes longer when investor confidence is down.

Thailand has also been trying to increase its use of bio-fuels by reducing taxes and raising implicit subsidy. Oil import cost has risen sharply to nearly 10 percent of GDP and the pressure to reduce oil consumption is high. However, the domestic cost of producing bio-fuels appears to be higher than petrol. The costs of Ethanol produced from sugarcane rise with increases in world sugar prices and have been higher than petrol in 2005 and 2006; it has thus required large tax reductions to make its use commercially viable. Thailand is seeking to keep prices of gasohol Bt1.5 per liter lower than gasoline and bio-diesel prices Bt0.5 per liter lower than diesel. But it is coming at a cost. Going forward, this policy needs to be carefully examined to ensure that it does not become an excessive fiscal burden as use of gasohol and bio-diesel expands.

Public investment is expected to pick up only modestly as delayed disbursements start accelerating after January 2007. There is, however, a significant upside potential, if some of the 'mega-infrastructure' program is implemented quickly. If public investment in infrastructure turns out to be higher than is projected here, it should not only raise public investment contribution to GDP, but probably

also crowd-in private investment in addition to what is projected in this report.

Private consumption growth is unlikely to compensate for slow private and public investment growth in 2007. Farm incomes next year will not support household consumption growth as much as it did this year as world prices of Thailand's key crops, which have increased by 13 percent this year, are projected to rise by only 0.5 percent next year. Also the floods have damaged crop output. Moreover, household borrowing will be limited as household debt to income has been increasing rapidly since 2000, while lending rates continue to remain high from this year. Private consumption growth will therefore continue to slow down from last year.

Fortunately, Thailand's strengths in terms of sustained macro-stability, reduced external vulnerability and greater openness—all conducive to private investment—have been maintained.

The fiscal situation remains strong, and is expected to become expansionary. The central government budget is balanced this year, and is projected to be in deficit by about 1.2 percent of GDP. Public debt as of August is 41 percent of GDP and is projected to remain below 50 percent over the next 5 years.

Headline inflation peaked this year and will decline next year, with core inflation remaining low. Headline inflation this year will be slightly higher than last year's 4.5 percent. The rise in inflation this year is mainly from the rise in domestic retail petrol prices in the first half of the year, but next year inflation is expected to ease to around 2.5 percent. Core inflation rose this year but is expected to stabilize in 2007. Interest rates after rising in recent years has stabilized and could easily start to come down as inflation comes down and growth weakens.

Thailand's external situation remains robust. Because of the lower trade deficit and rebound in the services account, trade deficits are much lower than last year's. As a result,

the current account will be in surplus of around 1.5 percent of GDP this year, compared to a deficit of 2.1 percent last year. The current account surplus would be balanced next year as exports of goods decelerate while those of imports accelerate. At the end of August, foreign reserves stood at US\$59.4 billion or 3.2 times that of short term external debt. Total external debt is only 28 percent of GDP.

Thailand thus has a significant unfinished agenda of reforms, some of which can be implemented quickly while others will take more time. To improve the investment climate, regulations restricting businesses (e.g., rationalize price controls, clarify foreign ownership requirements, speed up licenses etc) can be reduced quickly, as can improved vocational education to provide more ICT and English language training. On the other hand it will take longer to improve infrastructure services and to enhance skill development, especially through secondary and tertiary educational services. To improve the financial sector services, passage of laws relating to secured transactions and to deposit insurance could increase access to credit and strengthen banks. Exporters can be supported by re-negotiating the US GSP scheme which expires this year and signing the FTA with Japan. To reduce costs of logistics and trade facilitation a few quick measures relating to customs would

help too. Strengthening social protection of workers can be done by systematically integrating the disparate schemes, as well as by enhancing the pension system. To reduce regional inequality, per capita public expenditure on the poorest North-East region can be increased and its integration with the rapidly growing Mekong region facilitated.

The interim government will continue policies to pursue good quality growth. The policy platform for the upcoming year as presented by the Prime Minister to the Legislative Assembly on November 3, 2006 are broadly consistent with the targets in five strategies laid out in the 10th National Economic and Social Development Plan (2007-2011) : (1) developing human resource and a knowledge economy, (2) strengthening communities and society, (3) economic restructuring, (4) maintaining biodiversity, environment, and natural resources, and (5) promoting good governance. These policies will promote better quality of growth, where the gains from growth are more fairly distributed to all sectors, regions and groups in the country, and are underpinned by good governance. The Government will also focus on political reforms including revising the 1997 Constitution, resolving the disturbances in the South, and holding elections in a year's time.

Recovery and Outlook

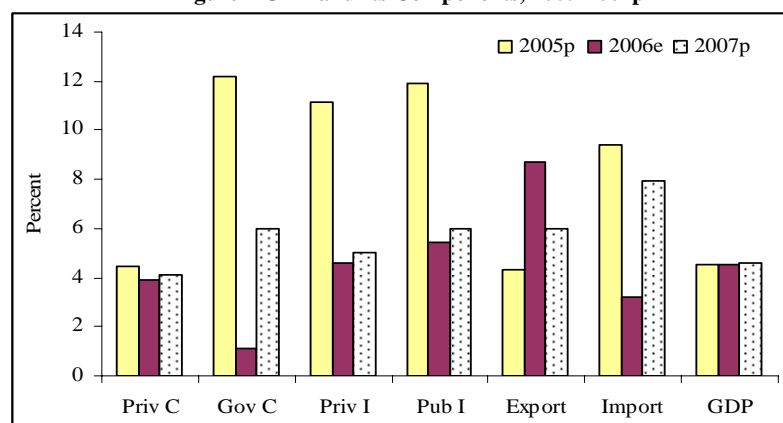
2.1 Real GDP Growth and Macroeconomic Developments

Real GDP growth this year will be 4.5 percent, similar to that of last year, and will speed up slightly to 4.6 percent next year. High energy prices, higher inflation and interest rates and political uncertainties have depressed domestic demand this year. Growth this year has been driven primarily by exports of goods, which have been increasing especially in terms of quantity. Next year, as inflation and interest rates decline with oil prices, domestic demand will pick up. However, the slowdown in global demand, especially those of Thailand's key trading partners such as the US and Japan, will affect Thai exports. Moreover, as the US Generalized System of Preferences (GSP) expires this year while the Thailand-US free trade agreement has stalled, Thai exports to the US next year could be slower. Similarly, the Thai-Japan free trade agreement which was planned to be signed this year will be delayed. In addition, the continuing real appreciation of the Thai baht will not help exports. Thus, net exports are unlikely to remain a key supporter of Thailand's economic growth next year. Whether or not Thai exports growth will pick up in a

sustained manner going forward will also depend on the supply-side factors—that is, whether or not Thailand can increase its competitiveness by producing products which are of higher value-added.

Real GDP growth this year was supported by high exports, while domestic demand continues to be depressed. Growth in 2006 continues to be adversely affected by the high oil prices and inflation, rising interest rates, and declining terms of trade. In addition to these, political uncertainties since the beginning of this year have lowered consumers' and investors' confidence and delayed public investments, all of which have depressed domestic demand this year. Real GDP growth this year will be 4.5 percent, the same as that of last year, achieved primarily from buoyant net foreign demand. Exports have increased sharply this year as a result of growth in terms of both volume and price as global demand expanded. Import growth, on the other hand, slowed down, with volumes and price decelerating in line with depressed domestic demand and the lower increase in the import price of oil this year (see Figure 1).

Figure 1 GDP and Its Components, 2005-2007p



Source: NESDB for 2005, WB for 2006 and 2007

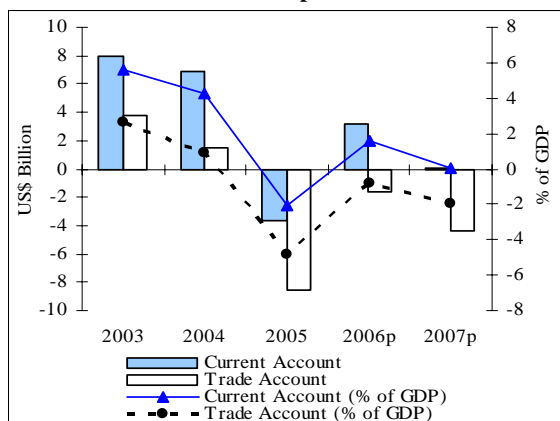
Note: e = estimated, p = projected

Real GDP growth in 2007 will be similar with that of 2006 as domestic demand recovers somewhat with lower oil prices, but the decline in foreign demand and supply-side constraints limit further growth. Real GDP growth next year is projected to speed up slightly to around 4.6 percent. The decline in petrol prices and inflation next year would help boost domestic demand. As petroleum prices in Thailand now reflect the world oil price, retail petroleum prices next year will fall with that of the world oil price. With lower oil prices and inflation, interest rates are also expected to be slightly reduced. These will help stimulate both household consumption and private investment. However, uncertainties in policies as well as in the global environment are still keeping firms from fully making their investments. Moreover, firms will need to continue adjusting to the high level of energy prices. At the same time, many constraints to investments as identified by firms are still not relaxed. Government budget disbursements, which have been delayed in the last quarter of 2006, will resume at the beginning of January 2007. This would raise the growth of public investment compared to last year. With the increase in domestic demand, import growth will accelerate next year. Exports, on the other

hand, will likely decelerate with the slowdown in the economies of Thailand's major markets, namely, the US, Japan, and the EU, and the expiration of the tax exemption for Thai export products to the US under the Generalized System of Preferences (GSP). The likely appreciation of the Thai baht both in nominal and real terms would not help exports either.

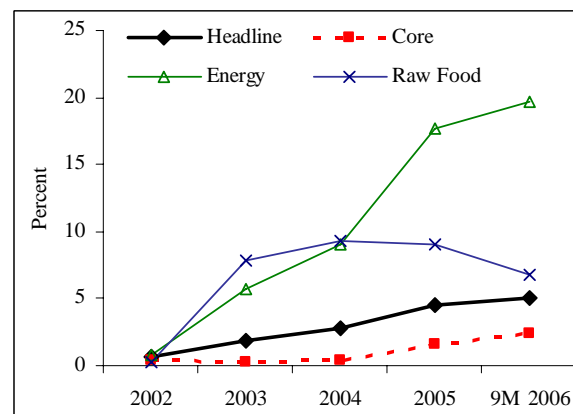
The current account has reverted back to a surplus this year and would likely be balanced next year. The trade deficit this year is lower than last year's as exports accelerate and imports slow down significantly. The trade account will be in a deficit of US\$1.7 billion or 0.8 percent of GDP as compared to a 4.8 percent deficit last year. The services account grew faster as tourism receipts rebounded from their slump in the first half of last year as a result of the tsunami disaster. The current account will be in surplus of around 1.5 percent of GDP this year, compared to a deficit of 2.1 percent last year. The current account would be roughly balanced next year as exports of goods decelerate while those of imports accelerate with the pick-up in investments (see Figure 2).

Figure 2. Current Account and Trade Account, 2004-2007p



Source: BOT for 2003-2005, WB projections for 2004 & 2005

Figure 3. Inflation, 2002 – 9M2006



Source: BOT

Thailand's external and fiscal situation remains strong. The current account this year had added to the already high level of foreign reserves. At the end of September, reserves stood at US\$61.6 billion or 3.2 times that of short term external debt. Total external debt is 28 percent of GDP. The central consolidated central government's fiscal balance ² in FY2006³ was in surplus by roughly Bt136 billion or 1.7 percent of GDP, mainly as a result of the surpluses of the extra-budgetary accounts and the social security funds. The central government's budget for FY2007 of Bt1,520 billion will be in deficit by Bt100 billion or 1.2 percent of GDP, after running a surplus in FY2004 and a slight deficit this year. Public debt as a share of GDP as of August is 41 percent and is projected to remain below 50 percent over the next 5 years.

Oil prices and inflation, as well as interest rates, have risen to their peak this year and are projected to decline next year. Domestic retail petrol prices this year have risen by 20 percent on top of the 30 percent increase last year. As a result, the sharp rise in the petrol price has raised both the headline and the core inflation in Thailand (see Figure 3). Retail petrol prices rose quickly in the first half of the year compared to the same period last year. This reflects the sharp increase in world oil prices in the first half of this year, coupled with the low base effect in the first half of last year before the retail diesel price was floated in July 2005. Headline inflation

² According to the Government Financial statistics (GFS) system, consolidated fiscal balance includes the central government's budget accounts, the extra-budgetary account, and the social security funds. In Thailand, the extra-budgetary accounts include accounts of the following extra-budgetary funds: Oil Fund, Farmers Aid Fund, Fund for Farmers Assistance, Environment Fund, Distribution of Production and Employment to Rural Areas Fund, Rubber Replanting Aid Fund, Education Loan Fund, Rural Development Fund, Urban Community Development Fund, Primary School Lunch Fund, and Village and Urban Community Fund. The social security funds include the Social Security Fund and the Employment Contribution Fund.

³ Fiscal year 2006 runs from October 2005 to September 2006.

correspondingly reached its peak in May at 6.2 percent before declining in the subsequent months to 2.7 percent in September as oil prices eased in the second half of the year. Headline inflation this year will be slightly higher than last year's 4.5 percent, the highest level since 2002, while core inflation rises to almost 2.5 percent. With the rise in inflation, the Bank of Thailand has raised policy rates from an average of 2.7 percent last year to 4.8 percent this year. The minimum loan rate (MLR) has also risen to 7.7 percent in September compared to 6.5 percent at the end of last year. Next year, interest rates are expected to decline slightly with the ease in inflation as oil prices fall. Nevertheless, world oil prices will remain high at around US\$60 per barrel, a decline from US\$65 per barrel this year (see External Environment section). Retail petrol prices in Thailand, however, are expected to decline by less than that of world oil prices as the contribution to the Oil Fund (which is added to the retail price of petrol) will be revised upwards. Headline inflation is therefore expected to fall to around 2.5 percent next year, while core inflation could fall close to 2 percent.

The sharp rise in energy prices coupled with firms' inability to adjust prices, partly due to the fact that price controls have negatively affected firms' production, productivity, and investments. Prices of the main energy sources for firms, namely diesel, fuel oil, and electricity, have on average increased by 20 percent this year and are almost double their 2002 levels. Because Thailand is a highly oil intensive economy (see Box 1), the rise in petrol price has a large impact on firms' cost of production. The high cost of production has been cited by the 586 firms in the Bank of Thailand's monthly business sentiment index survey as their top constraint in doing business in the first eight months of the year. In addition, the difficulty in adjusting prices has also been reported as one of the top three constraints in doing business this year. Sub-sectoral analysis shows that the impact of the oil price rise seems to be largest in the cement and concrete, basic

chemicals, and non-metallic products industries as they are the most oil intensive (see Table 1). Their production over the period of 2002 to 2005 has declined by greater than the manufacturing sub-sector average. On the other hand, the increase in price, especially in the cement and concrete industry, has been quite small (see Table 2). This can be partly attributed to the price control measures that have been in place to limit the rise of domestic prices. There are currently over 200 products and services which are subjected to some form

of price monitoring and control, which are mainly enforced at the manufacturer's level. This amounts to roughly half of the manufacturing sector's value-added. The inability of firms to raise prices would reduce their margins and hence negatively affect their decisions to expand. In addition, a recent study from the Bank of Thailand shows that the total factor productivity (TFP) is also lower for firms in industries that are subjected to price control (see Box 2).

Table 1. Index of Energy Cost Share of 15 Industries
(Fabricated Metal Products = 1)

Rank	Manufacturing Sub-sectors	Energy Cost Share (of Total Cost)		
		Petroleum Products	Electricity & Gas	Total
1	Cement and Concrete Products	10.7	8.3	9.6
2	Basic Chemical Products	4.4	6.6	5.5
3	Other Non-metallic Products	4.5	5.4	4.9
4	Spinning, Weaving and Bleaching	1.3	6.6	3.8
5	Non-ferrous Metal	4.8	2.6	3.8
6	Iron and Steel	2.4	5.1	3.7
7	Other Chemical Products	4.0	1.7	2.9
8	Plastic Wares	0.6	4.6	2.5
9	Other Foods	1.4	3.4	2.3
10	Industrial Machinery	2.1	1.3	1.7
11	Rubber Products	1.3	2.0	1.6
12	Textile Products	0.5	2.0	1.2
13	Saw Mills and Wood Products	0.5	1.8	1.1
14	Paper and Paper Products	0.9	1.3	1.0
15	Fabricated Metal Products	1.0	1.0	1.0

Note: Computed from Thailand's Input-Output Table (2000).

Table 2. Producer Price and Output Dynamics for Selected Industries, 2002-2005

	Producer Price Index % Change (2002 to 2005)	Difference between 2003-2005 and 2000-2002 MPI* Average Growths (Percentage points)
Basic Chemical Products	39.5%	-5.4%
Rubber Products	11.6%	-12.7%
Cement and Concrete Products	7.9%	-1.8%
Iron & Steel Products	53.6%	-15.6%
Manufacturing sub-sector Average**	14.0%	-0.8%

Source: Ministry of Industry and BOT

* MPI is the Manufacturing Production Index.

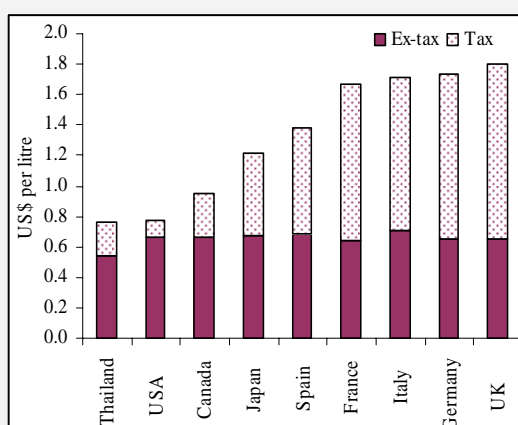
** Manufacturing sub-sector includes 53 industries, which accounts for 75 percent of the manufacturing sector's total value-added.

Box 1. Thailand's High Oil Intensity

Thailand's oil intensity is one of the highest in the world, which can be attributed to the low price of petrol in Thailand and the resulting dominance of highly oil-intensive road transportation in Thailand's transport sector. Computed as oil consumption in barrel per year as a ratio of 1 million US dollars GDP at year 2000 prices, oil intensity in Thailand in 2004 is roughly 6. This is more than 6 times that of Japan and roughly 3 times that of the US. This high intensity can be explained by the low prices of petrol in Thailand which has resulted in a large highly oil-intensive road transport sector. Over 90 percent of commercial transportation within Thailand is by means of road, which is roughly 4 times more energy intensive than water and rail transportation. The bulk of transportation in Bangkok is by personal cars, while public buses and rail accounts for only a third of transportation in Bangkok as compared to more than two-thirds in London, Tokyo, and New York.

Thailand's petrol price is one of the lowest amongst net oil importers due to the low taxes on petrol. Compared to 172 countries around world, Thailand's diesel price in 2004 ranks 37 (from lowest to highest price). Countries that have retail diesel prices lower than Thailand's are net oil exporters or low income countries⁴. That is partly because diesel in Thailand was subsidized in 2004 with the imposition of the retail ceiling price. However, even in after the lifting of the diesel price ceiling in July last year, retail diesel prices in June this year remains below that of many countries including Cambodia and Lao PDR. Similarly, retail price of gasoline, which is no longer subsidized, is also below those of countries in the region. This relatively low price reflects the relatively lower taxes and fees levied on gasoline and diesel. For gasoline, for example, in May 2006, these taxes and fees accounts for 30 percent of its price in Thailand, while accounting for 60 percent in the European Union (see Figure 4). The taxes and fees on retail gasoline and diesel price is presented in Table 3. The relatively low price does not only contribute to the low efficiency use of oil in the transportation sector as discussed below, but also discourages the use of biofuels which are generally more costly to produce than petrol.

Figure 4. Retail prices of Benzene for Selected Countries as of May 2006



Source: Thaicharoen et al (2006)

Table 3. Structure of Retail Gasoline and Diesel Price, November 2, 2006

(Unit: Baht per liter)

	Gasoline 95	Gasoline 91	High-speed Diesel
Ex-refinery	14.15	13.70	16.43
Excise Tax	3.69	3.69	2.31
Municipal Tax*	0.37	0.37	0.23
Oil Fund	3.46	3.26	1.50
Energy Conservation Fund	0.04	0.04	0.04
Wholesale Price (WS)	21.7	21.06	20.51
VAT	1.52	1.47	1.44
WS&VAT	23.22	22.53	21.95
Marketing Margin	2.31	2.21	2.14
VAT	0.16	0.15	0.15
Retail Price	25.69	24.89	24.24

Source: EPPO

* Municipal tax is 10 percent of excise tax

A higher petrol price and development of more fuel-efficient modes transportation could help increase the efficiency of oil use in Thailand. As petrol taxes in Thailand are relatively low, there is scope to raise them, thus raising the price of petrol and discouraging its inefficient use. However, international experience shows that this measure is effective when it is accompanied by the development of alternative modes of transportation which are more fuel efficient. In the commercial transportation sector, for example, rail transportation would be an alternative to road transportation. For the transportation of passengers, mass transportation that is convenient and efficient would be an alternative to personal vehicles. Moreover, the higher taxes collected on petrol could help fund the development of these alternative modes of transportation.

⁴ Survey of 172 countries by the German Technical Cooperation (GTZ) in November 2004 as reported in Thaicharoen et al, *The End of Low Oil Price Era: Lessons and Challenges for Thailand's Energy Strategy* (a paper presented at the Bank of Thailand Symposium 2006)

Box 2. Price Control in Thailand and Its Impact on Firm's Productivity

Price controls of varying degrees cover over 200 products and depress profitability and private investment while having a relatively small impact on inflation. Thailand has been implementing selective price-controls on goods and services since 1979, though its coverage has expanded significantly in recent years under the *Prices of Goods and Services Act 1999*. Products are controlled under two lists, namely the *Controlled List* and *Monitored List*, and are enforced primarily at the manufacturer's level. Both lists together currently cover approximately slightly less than half of Thailand's manufacturing sector value-added. Nevertheless, the impact on restraining inflation is likely to be limited as the products on both lists accounts for less than 20 percent of the CPI basket. A recent analysis by Ariyapruchya et al (2006)⁵ of over 1,300 firms surveyed for the *Thailand Investment Climate, Firm Competitiveness and Growth*⁶ showed that firms subject to price controls are also the ones with lower total factor productivity.

There are some differences in the way price controls are implemented under the two lists. The *Controlled List* includes 35 items of goods and services⁷, and the *Monitored List* covers 200 items. The *Controlled List* is revised at least once a year and is approved by the Cabinet before its implementation and each item can be subjected to any of the eight legal measures described in Table 4. The *Monitored List* covers 200 products divided into three sub-groups and are regulated by the Department of Internal Trade's (DIT) administrative measures. The first sub-group is the *sensitive list* and both their domestic and international prices of products are monitored closely every day. The *priority watch list* is the second sub-group and has a lower monitoring level such that their domestic prices and general market situation are monitored twice a week. The third sub-group is the *watch list* in which product prices are monitored every two weeks.

Table 4. Legal Measures Applied to Products in the Price Controlled List as of September 2006

Measures	Products
Report selling prices and must receive an approval before increasing prices	1) milk powder and fresh milk, 2) fertilizer, 3) pesticide, 4) milk product including condensed milk, low fat milk, and coffee creamer, 5) canned food, 6) electrical wire
Report selling prices and inform of price changes in advance between 7-15 days	1) liquid detergent, 2) dish detergent, 3) sanitary napkin, 4) tire, 5) cement, 6) detergent, 7) soap, 8) shampoo, 9) vehicle like passenger car, motorcycle and truck, 10) craft paper, 11) corrugated cardboard
Report selling price after price change between 1-2 days	1) liquefied petroleum gas
Price tags must be attached visibly	1) fuel oil
Maximum prices control	1) sugar
Report selling prices monthly	1) plastic in primary form (i.e. plastic resin)
Report cost, inventories, and stock holding	1) steel 2) palm oil 3.)printing and writing paper 4) paper pulp
Restrict transportation	1) palm oil (reporting monthly stockpile, inventories and import plan) 2) rice (reporting monthly quantity movement larger than 10 tons in the restricted areas)

Source: DIT

⁵ Ariyapruchya K., C. Karnchanasai, and C. O-lanthanasate, *Strengthening the Competitiveness of Thai Firms: What needs to be Done?*, a paper presented at the Bank of Thailand Symposium 2006.

⁶ A joint NESDB-World Bank study (2006)

⁷ There are two services in the list, namely, intellectual property right on music and intellectual property right services.

In practice, most products in the *Controlled List* and the *Monitored List* must receive approvals from the Department of Internal Trade (DIT) to raise their prices. Seven out of 35 products in the *Controlled List* need to receive an approval before raising their prices under the Prices of Goods and Services Act (1999) (see Table 4). Manufacturers of others products in the *Controlled List*, in practice, also report the price changes of their products to the DIT. The DIT can request the manufacturers to review their prices, if the prices are deemed too high or too low after a technical cost analysis for the product⁸. The same is true for products in the *Monitored List* in which the DIT has implemented the administrative measures requesting for collaboration from the manufacturers such that any change in prices shall be reported. In general, most manufacturers follow the DIT's requests as the DIT may take legal actions against those who do not or reclassify their products into the *Controlled List* in the following year.

These price controls may discourage manufacturers from further investments and productivity improvements and the private sector has been complaining about this effect. A rough calculation of the effect of price control on manufacturing sector found that products in the price *Controlled List* and the *Monitored List* amount to around half of total value added in the manufacturing sector⁹. Subjected to price control, manufacturers' profit margins would likely be squeezed as their costs of production have been rising due to the higher oil prices. Given so, manufacturers would delay further investments to expand or improve their production.

⁸ The DIT will then analyze if an increase in prices is necessary by following these procedures 1) analyzing the cost of production using DIT's guideline prices, 2) performing a supply chain analysis to see what is the appropriate retail prices, 3) taking into account a possibility of economies of scale. If the submitted price raise is in line with the DIT's cost analysis, then it will be allowed. If not, there would be a negotiation between the DIT and the manufacturers to reach the mutually agreed prices before receiving an approval to increase prices.

⁹ This figure is derived from weights of manufacturing industries in the manufacturing production index that is compiled by the Office of Industrial Economics, Ministry of Industry. These industries accounts for 75 percent of the total value-added of the manufacturing sector in GDP. However, the level of disaggregation of the industries allows for only a rough estimation of the size of the manufacturing sector affected by price control. Around 60 products can not be mapped into the industries, while some industries include products which are not in the price monitoring lists.

Private investment growth has significantly slowed down this year and would accelerate only slightly next year as supply-side bottlenecks to investments remains. This year, the sharp rise in energy prices, rising interest rates, real appreciation of the baht, delays in public spending, political uncertainties, price controls, and the uncertain outlook of global demands in the coming years have taken a large toll on growth in both manufacturing production and private investment. Manufacturing production growth this year grew at around 5.5 percent, similar to last year, which is lower than its growth rates of 10.2 percent in 2003 and 8.2 percent in 2004. As a result, capacity utilization has only risen by 0.5 percentage points last year and another 2 percentage points this year. Private investment will grow at around 4.6 percent this year, compared to 11.2 percent last year, and is the lowest since 2002. With the overall manufacturing capacity utilization very close to pre-crisis levels and many industries running at above 90 percent utilization, private investment growth next year should pick up to around 5 percent as energy prices fall, public investment resumes, political uncertainties are reduced and investor sentiments slightly improved (see Private Investment Section). On the other hand, the continued real appreciation next year and the uncertain global economy in the next few years also restrict investments growth as export prospects do not look as favorable as in the past. In addition, supply-side constraints to investments that have been reported by firms since 2004, such as the lack of skilled workers and the high regulatory burden in doing business, have not been adequately addressed (see last paragraphs of this section for further discussion). As a result, private investment recovery can be expected to slow down in the few years to come even though capacity utilization may have reached pre-crisis levels.

Foreign direct investment (FDI), which was quite robust this year, will likely slow down next year. Gross foreign direct investment was quite robust this year, expanding in the first 8 months of the year by US\$2.5 billion, or a 37 percent increase from the same period

last year. Sectors with the highest investments are the investment, real estate and industry sectors. Within the industry sector, the machinery and transport equipment, the metal and non-metallic, and electrical appliances industries have attracted foreign investments most this year. This would, however, not likely be the case next year as foreign investors will likely remain cautious and wait for greater clarity in policies, especially those related to foreign share holding and free-trade agreements. Moreover, the supply-side constraints to investment mentioned above would also limit additional foreign direct investment in the years to come as foreign investors will choose to move to where the constraints are less. Foreign direct investment applications for the Board of Investment (BOI) privileges in the first 8 months of this year, for example, have dropped by half from the same period last year.

Public investment next year will speed up as disbursements, which have been delayed this year, will start in the beginning of next year. Public investments this year have been delayed, particularly those coming from the central government budget¹⁰ as there were cash flow management problems in the beginning of the year and delays in disbursing the investment budget amidst political uncertainties. Hence, public investment this year only grew by 5.4 percent in real terms compared to 11.9 percent last year. The FY2007¹¹ investment budget will be disbursed in January next year. Public investment is therefore expected to rise further next year since the central government budget will be disbursed for a full year. However, there will be delays in the disbursement of large infrastructure projects (known as mega-projects) or investments which will be mostly undertaken by state-owned enterprises because they are undergoing revisions by the government. Thus, public investment growth next year should increase slightly by around 6

¹⁰ Central government public investment is around half of total public investment with state-owned enterprise investment making up the other half.

¹¹ FY2007 is from October 2006 to September 2007.

percent. However, this would somewhat crowd-in private investment and help raise investor sentiment.

Household consumption next year will grow slightly higher than this year as inflation eases. With this year's sharp rise in petrol prices and inflation, household consumption growth has slowed down to 3.9 percent this year compared to 4.4 percent growth last year. Amidst political uncertainties, consumer confidence has been falling since the beginning of the year before rebounding slightly after the change of government in September. Next year, lower petrol prices and lower inflation will help increase consumers' purchasing power and confidence, thus raising the growth in household consumption. Farm incomes, however, will support household consumption growth less next year as world prices of Thailand's key crops, which have increased by 13 percent this year, are projected to rise by only 0.5 percent next year. Moreover, household borrowing will be limited as household debt to income has been increasing rapidly since 2000, while lending rates continue to remain higher than those in 2002 to 2004.

Exports next year will unlikely expand as much as they did this year. Exports of goods this year have benefited from the improving global demands for Thai products, which is reflected in both the high expansion of export volume as well as an increase in export prices. Export volume grew by almost 9 percent this year with values expanding by around 18 percent. The top three Thai exports remain non-electrical machinery and parts (HS84), electrical machinery and equipment (HS85), and vehicles and parts (HS87). The main markets are the US, Japan, and EU. Growth of exports of services, on the other hand, is the result of the rebound of tourism from the tsunami disaster at the end of 2004. As the global environment is quite uncertain next year with world trade volumes expected to decelerate as well as the growth rates of the economies of Thailand's key trading partners (see External Environment section), the export of goods next year is also expected to

decelerate. Moreover, tax exemptions for Thai exports to the US under the GSP will expire at the end of this year, while the Thailand-US bilateral free trade agreement (FTA) negotiations have been delayed (see Exports section). Similarly, the Thailand-Japan free trade agreement which was planned to be signed this year could be delayed until next year. Export quantity of goods next year is therefore expected to grow by around 5.5 percent and values by 13 percent. Export of services, however, should continue to grow at 9 percent, a rate similar to this year's, as tourism continues to do well.

Table 5. Imports Volume and Value, 2004-2006

(% change, year-on-year)

	2004	2005	2006p
Consumer Goods			
Unit value	3.4	8.1	10.6
Volume	13.9	4.0	3.6
Value (7.6%)	17.8	12.4	14.6
Raw Materials			
Unit value	11.3	12.6	7.3
Volume	14.0	4.9	-2.4
Value (41.1%)	26.8	18.1	4.7
Capital Goods			
Unit value	13.4	9.5	2.2
Volume	3.4	13.7	1.7
Value (26.4%)	17.3	24.5	4.0
Fuel & Lubricant			
Unit value	27.5	38.7	30.8
Volume	15.4	14.2	-6.6
Value (20.2%)	47.1	58.4	22.2
Total			
Unit value	13.4	16.0	8.1
Volume	10.9	8.5	1.0
Value (100%)	25.7	25.9	9.0

Source: BOT, WB

Note: Figures in () are shares in 2006 as estimated by WB

Imports will pick up next year with the acceleration in investments. Imports of goods and services grew very modestly this year from an exceptionally high base last year coupled with the low growth of investments and the running down of inventories this year. Last year, imports of goods rose sharply in the first half of the year with the rise in imports of oil and of iron and steel, the latter mainly for stocking up. This year, imports of oil, which is roughly 20 percent of total imports, have slowed down to 22 percent in response to the sharp rise in its price. The import value of iron and steel has contracted from last year's level by 19 percent. With the over all deceleration in investments and manufacturing growths this year, imports of raw materials and capital goods have slowed down considerably from last year both in terms of volume and value (see Table 5). As a result, import volume only grew by around 1 percent this year, while its values increased by 9 percent, the lowest rate since 2003. The largest contributors to imports growths this year are imports of crude oil, metal and metal products, and integrated circuits. Next year, to replenish the inventory stock as well as respond to the slightly higher growth in public investment, import volume is

estimated to grow at a higher rate of 6.4 percent with values growing by 15 percent.

In the medium term, Thailand growth will be difficult to sustain if the increasingly binding supply-side constraints are not urgently addressed. As capacity utilization is now very close to the pre-crisis levels with capacity utilization of half of the exporting sectors exceeding 80 percent this year, a supply constraint will soon emerge without sufficient private investment growth. However, private investment growth will not be able to speed from much from its current low levels if the constraints to investments are not soon resolved. The constraints indicated by the firms surveyed in the *Thailand Investment Climate, Firm Competitiveness and Growth study*¹² are the regulatory burden, a shortage of skilled labor and infrastructure inadequacies. Thus, streamlining of regulations (in respect of investment, labor, tax, customs, etc.) will be an important step for raising rates of return for firms (see Medium Term Agenda for Growth and Poverty Reduction section).

¹² The joint study by the National Economic & Social Development Board (NESDB) and the World Bank, which included a survey of 1,385 establishments

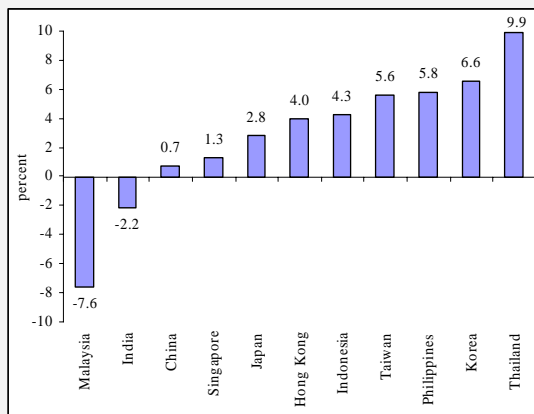
Relaxing the price controls on the 200 consumer products that have been put in place since last year will also help increase firm's productivity and expansion. Similarly, improvements in secondary education, vocational education, English skills and IT skills will significantly contribute to removing the constraint of skill-availability and the firms' expansion of ICT-use. Expansion of infrastructure and infrastructure services will lower logistics costs of firms. The planned

adoption of biofuels, which are aimed to reduce Thailand's dependency on oil imports and cost of oil inputs for firms, also needs to be carefully considered as international experiences suggest that biofuels generally are not cheaper to produce than fuel petroleum and need significant government support to be commercially viable (see Box 3 on International Experiences of Biofuel Adoption).

Box 3. International Experience of Biofuel Adoption

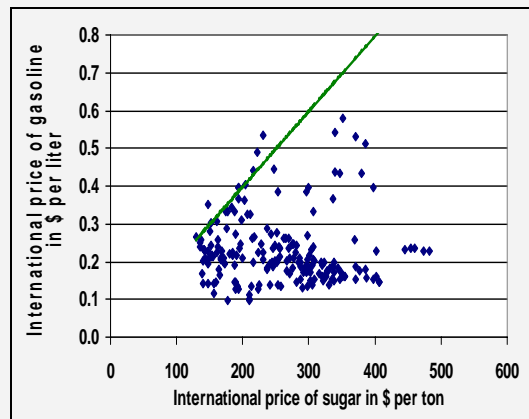
Being a country with a high dependency oil imports, the interest in biofuels in Thailand has been renewed in the past few years when world oil prices have risen rapidly. Thailand is a net importer of oil. It imported 88 percent of total oil consumption in 2005. Thailand's dependency on oil imports has increased by more than 3 folds in the past decade. Oil imports as a share of GDP was 2.7 percent in 1995 and have risen to 9.9 percent by 2005, one of the highest in the region (see Figure 5). This is also reflected in the rise in the share of oil imports in total imports from 6.8 percent in 1995 to 17.7 percent in 2005. The sharp rise in oil imports has put pressure on the current account, which is one of the key motivations for the recent renewed interest in biofuels.

Figure 5. Net Import of Fuel and Lubricants as Percent of GDP for Selected Countries, 2005



Source: Thaicharoen et al, The End of Low Oil price Era: Lessons and Challenges for Thailand's Energy Strategy (a paper presented at the Bank of Thailand Symposium 2006)

Figure 6. Comparison of Price of Gasoline and Sugar and Breakeven Prices for Gasoline and Sugar (2006US\$)



Source: WB

Note: Each point represents a monthly data between January 1990 and July 2006.

The solid line plots the breakeven prices for gasoline and sugar, above which ethanol would be cheaper than gasoline.

International experiences suggest that without government support, biofuels have been more costly than petroleum fuels. The reasons are that the production cost of biofuel is generally higher than that of petrol and their prices are highly correlated. Figure 6 plots the real prices for premium gasoline and sugar, which is so far the feedstock that yields least-cost ethanol, from January 1990 to July 2006. The solid line in Figure 6 plots the breakeven prices for gasoline and sugar, above which ethanol would be cheaper than gasoline (after allowing

for 20 percent less fuel efficiency for ethanol). During the period covered, ethanol price broke even in only a handful of months, mostly in 2005. In 2006 when oil prices were very high, ethanol from sugar cane was not cheaper than premium gasoline because the high world sugar prices. Actually, the price of biofuels and petroleum fuel prices are generally highly correlated. An analysis of correlations between monthly world prices of feedstock for biofuels, namely, sugar and molasses, between 1994 and 2006 shows that their correlations with and Brent crude oil are 80 percent and 90 percent, respectively. Moreover, biofuels are less fuel efficient than petrol, that is, vehicles can run a shorter distance on biofuels compared to the same amount of petrol. Ethanol is 20-30 percent less fuel efficient than petrol, that is a vehicle using one liter of ethanol can run on average 20-30 percent less distance than using one liter of gasoline (premium gasoline). Similarly, biodiesel is 5-10 percent less fuel efficient than high-speed diesel. Thus, this must also be taken into account when comparing biofuel and petroleum fuel prices on a volume basis.

Biofuels have therefore generally required large tax reductions to make them commercially viable. All biofuel markets have been supported by government protection policies that include one or more of the following market interventions: fuel tax reduction or exemption, mandatory blending, government purchase policy for biofuels, producer subsidies, high import tariffs, and financial incentive programs for users of biofuels such as lower taxes on vehicles designed for biofuels. Among the biofuel consumption support measures, fuel tax reduction is the most common and is widely used. This instrument critically depends on the presence and the magnitude of excise taxes levied on petroleum fuels. Industrial countries usually levy high taxes on petroleum fuels, while many developing countries levy low or even negative taxes. Because biofuels have historically required large tax reductions, countries with low taxes on petroleum fuels would find it difficult to launch commercially viable biofuel markets.

Thailand currently provides significant fuel tax and fee reductions to keep biofuel prices below those of petroleum fuels. Thailand currently produces ethanol mainly from molasses (a by product of sugar), and biodiesel from palm oil. Currently, a liter of gasohol is made up to 10 percent ethanol and 90 percent gasoline. A liter of biodiesel is made up to 5 percent biodiesel and 95 percent high-speed diesel. There are plans to increase the proportion of biofuel mixtures in the future. The government has a policy to maintain a consistent price difference of Bt1.5 between gasohol and gasoline and a Bt0.5 per liter between biodiesel and diesel. On 2 November 2006, for example, gasohol was Bt24.19 (US\$0.65) per liter, compared to Bt25.69 (US\$0.69) per liter of premium gasoline. This is achieved through lower taxes and fees levied on gasohol of Bt2.47 per liter as compared to those levied on premium gasoline (see Table 6). The price difference more than compensates for the lower fuel economy of gasohol, making it financially attractive to end-users.

Table 6. Price structure of Gasoline 95 and Gasohol November 2, 2006
(Unit: Baht per liter)

	Gasoline 95	Gasohol*	Difference
Ex-refinery	14.15	15.5	1.35
Excise Tax	3.69	3.32	-0.37
Municipal Tax**	0.37	0.33	-0.04
Oil Fund	3.46	1.5	-1.96
Energy Conservation Fund	0.04	0.04	0
Wholesale Price (WS)	21.7	20.68	-1.02
VAT	1.52	1.45	-0.07
WS&VAT	23.22	22.13	-1.09
Marketing Margin	2.31	1.92	-0.39
VAT	0.16	0.13	-0.03
Retail Price	25.69	24.19	-1.5
of which Taxes and Fees	9.24	6.77	-2.47

Source: EPPO

* Gasohol is currently made up to 10 percent ethanol and 90 percent gasoline

** Municipal tax is 10 percent of excise tax

Subsidies on biofuels in Thailand could be reduced if petrol taxes rise and more producers enter the market. Cross country comparisons show that petrol taxes in Thailand are relatively low (see Box on Thailand's High Oil Intensity). There is therefore scope to raise petrol prices, which will raise petrol prices, making biofuels more attractive to users, while requiring less subsidies from the government. The petrol tax receipts can also be used to fund the subsidies and research and development of biofuels. Moreover, with the recent liberalization of ethanol production, an increasing number of ethanol producers have started to enter the market, including those producing ethanol from fresh tapioca. Ethanol made from fresh tapioca is currently cheaper to produce per liter in Thailand when compared to production from molasses or sugar cane. The cheaper cost of production plus the increasing supply could help reduce the prices of ethanol in the near future, thus reducing subsidies needed to make them commercially attractive compared to petrol.

2.2 Poverty

Cross country comparisons from 2000-2005 show that Thailand has achieved remarkable success in reducing the number of people who live under US\$1 per day. Head count ratio of those living in extreme poverty (less than 1993 PPP US\$1 a day¹³) in Thailand dropped from 5.2 million people in 2000 to 1.7 million people in 2005 (see Figure 7). This represents a 67 percent decrease in poverty headcount, compared to an average of 42 percent decline in the East Asian region. This is mainly the result of the wages per person in the agriculture sector which has risen by 5 percent per year since 2001, compared to non-farm wages which has risen at 2 percent per year. In addition, unemployment in agricultural sector had dropped by more than 70 percent from 2001 to 2005. These have greatly help reduced poverty in Thailand as over 80 percent of the poor in Thailand are engaged in agricultural activities

Over the medium term, the reduction in poverty incidence could, however, be slower if Thailand's growth slows down. There has clearly been a high correlation between poverty reduction and real GDP growth in Thailand. From 2000 to 2005, Thailand's real GDP growth has averaged 5 percent per year,

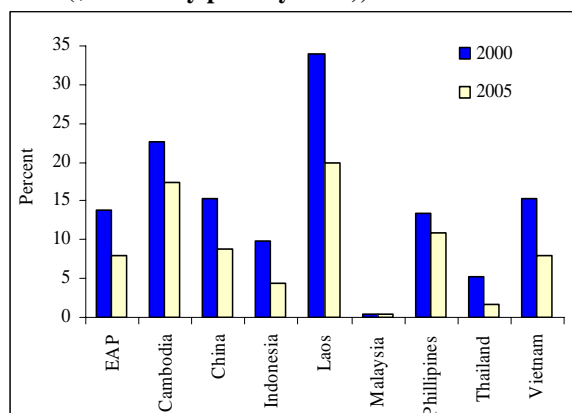
and headcount poverty ratio has declined by 67 percent during that period. If Thailand is able to grow at 4.6 percent in 2006 and 6 percent in both 2007 and 2008, estimates show that the poverty headcount ratio in 2008 would only be half that of 2005, with the reduction in the number of people living in extreme poverty (below 1993 PPP US\$1 per day) by more than 550,000. On the other hand, if growth stagnates at 4.5 percent per year from 2006 to 2008, less than 500,000 people will be lifted out of extreme poverty (see Figure 8).

In 2004, poverty continues to be highest in the Northeast which is home to half of Thailand's poor. Data available from the latest Thailand Socio-Economic Survey (SES) 2004 shows that poverty is concentrated in the Northeast, North and the two Southernmost provinces of Thailand – Pattani and Narathivas. More than one third of the provinces in the Northeast region have headcount ratios that are double that of the national level of 13 percent¹⁴. The poverty gap between the rural and urban areas has not reduced in the past decade. In 2004, more than 87 percent of the poor were concentrated in the rural areas, similar to that in 1996.

¹³ 1993 PPP (or purchasing power parity) US dollar is the basket of consumption that US\$1 can buy in the US in 1993. That basket of consumption is then converted into the amount of local currency needed to buy it in each country. It is therefore usually less than the nominal exchange rate to the US dollar.

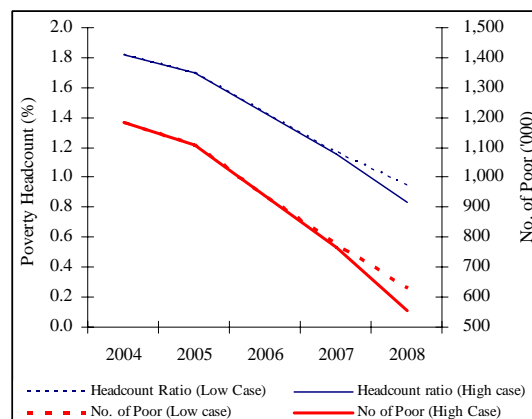
¹⁴ This is based on Thailand's national poverty line of Bt1,242 per person per month in 2004.

Figure 7. East Asia Poverty Headcount ratio (\$US1 a day poverty line*), 2000 and 2005



Source: World Bank
*1993 US\$1 PPP

Figure 8. Scenarios of Poverty Trends, 2004-2008

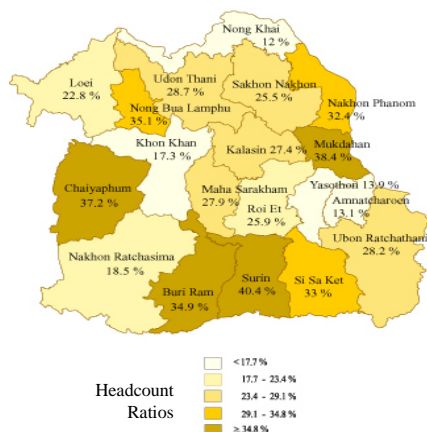


Source: World Bank
Note: High case (Low case) refers to real GDP growth rates of 4.6, 6.0, and 6.0 (4.5, 4.5, and 4.5) percent in 2006, 2007, and 2008, respectively

There exists a large variation in poverty incidence within the Northeast region. Within the Northeast region, Surin, Buri Ram, Chaiyaphum and Mukdaharn are the poorest provinces with poverty incidence higher than 34 percent in 2004. On the other hand, Nongkhai province has a poverty headcount ratio of 12 percent, lower than the national average and lower than many provinces in the

Central region. This distinction is made possible by the use of poverty maps like the one in Figure 9. Disaggregated poverty maps have been developed for the provincial and the district levels. They are powerful tools in identifying areas of high poverty incidence and concentration, such that poverty reduction interventions can be effectively targeted to the poor (see Box 4. Identifying Thailand's Poor Using Poverty Maps).

Figure 9. Poverty Map of the Northeast Region, 2004



Source: NSO

Table 7. Average Per Capita Real Consumption

(Baht/Month)

	2000	2002	2004
1st Poorest Quintile	955	1,063	1,155
2nd Quintile	1,578	1,724	1,891
3rd Quintile	2,294	2,467	2,726
4th Quintile	3,449	3,638	4,040
5th Richest Quintile	7,845	8,205	9,558

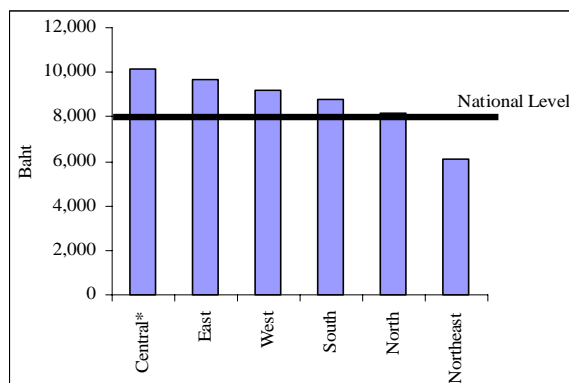
Source: WB Computation from SES data

Per capita consumption growth rate of the richest quintile from 2002 to 2004 has been greater than the poorest quintile, leading to an expanded gap between the two quintiles. During 2000-2004, average per capita consumption of the poorest quintile grew by 18 percent, while that of the richest quintile grew by 28 percent. Average per capita consumption of the richest quintile increased the fastest between 2002 and 2004, while that of the poorest quintile slowed down during that period (see Table 7). As a result, in 2004, per capita consumption of the richest quintile is 8.3 times that of the poorest quintile, an increase from 7.7 times in 2002.

Increased and targeted government spending on education, health care, and social security in the Northeast will help to

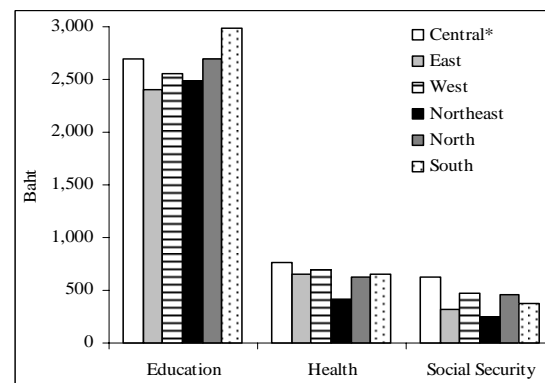
further reduce poverty and income inequality. In fiscal year 2004, the Northeast region, where poverty incidence is highest, received an actual government spending of Bt6,113 per capita. It was lower than other regions and below the national average of Bt8,108 per capita (see Figure 10). Also, the Northeast region received government expenditure per capita in education, health, and social security, which are services especially beneficial to the poor, far below other regions which have lower poverty incidences (see Figure 11). Thus, going forward, Thailand will need to improve its public resource allocation by increasing and targeting of public spending to areas of high poverty, if the success in poverty reduction of the past is to be maintained.

Figure 10. Actual Government Expenditure Per Capita, FY 2004



Source: NESDB
*Excluding Bangkok and Vicinities

Figure 11. Actual Government Expenditure Per Capita on Education, Health and Social Security, FY 2004



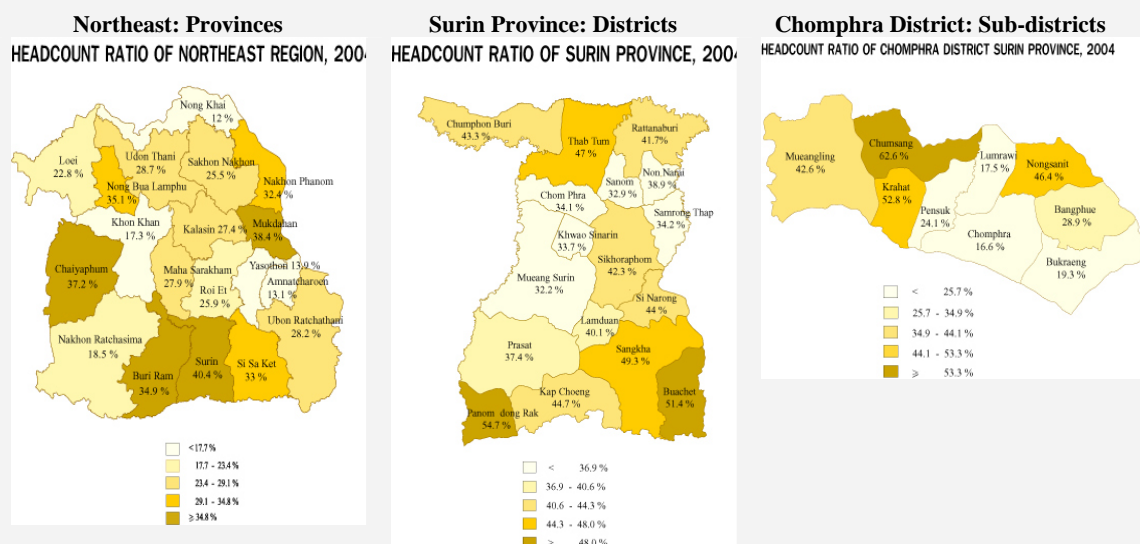
Source: NESDB
*Excluding Bangkok and Vicinities

Box 4. Identifying Thailand's Poor Using Poverty Maps

The quest to eradicate poverty is one of the key priorities of the Thai Government. In 2004, about 13 percent of Thailand's population was poor. As nationwide policies of poverty reduction are costly, policymakers need to know how to target scarce public resources to help the poor. Since poor people often cluster in specific areas, poverty maps at disaggregated levels, which highlight where poor people reside, are important tools for targeting public resource to the poor.

In collaboration with the National Statistics Office (NSO), the Office of the National Economic and Social Development Board (NESDB), and the World Bank, Dr. Somchai Jitsuchon and his team from the Thailand Development Research Institute (TDRI) developed in 2003 Thailand's first set of Small Area Poverty Maps (SAEMs). These maps were based on the 2000 Population and Housing Census and the 2000 and 2002 Socio Economic Survey (SES). Using the 2004 SES, NSO and TDRI have now updated these poverty maps to 2004. The maps depicts poverty and inequality indicators at sub-national scale, and as disaggregated as the sub-district and village levels.

Figure 12. Poverty Maps for Northeast Region at Different Levels of Spatial Resolution¹⁵



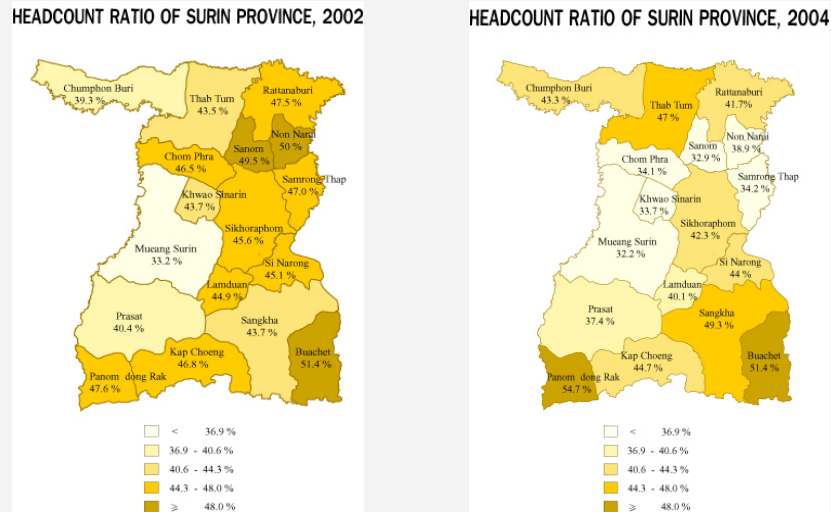
Source: NSO

Figure 12 shows poverty maps from the Northeast at different levels of resolution. The maps reveals that even within the high poverty region as the Northeast which is home to half of the poor in Thailand, there are only some provinces such as Surin, Buri Ram, Chaiyaphum and Mukdaharn that are much poorer than other provinces. Furthermore, within high poverty provinces such as Surin province, poverty is concentrated in only a small number of sub-district areas (i.e. Phanom Dong Rak, Buachet, Thaub Tum, and Sangkha). On the other hand, in the area with moderate poverty such as Chomphra district of Surin province, half of the sub-districts have high poverty, and another half have low poverty.

Comparing poverty maps at different points in time allows us to understand changes in the geographic pattern of poverty over time. Figure 13 shows that from 2002 to 2004 poverty fell significantly in Sanom district and Non Narm district, whereas there was little change in Buachet district.

¹⁵ This poverty map is the non-municipal area maps using consumption approach which prepared by the Economic Statistic Analyzing and Forecasting Group, National Statistical Office.

Figure 13. Comparing Poverty Map of Districts in Surin Province in 2002 and 2004



Source: NSO

With these poverty maps, Thai policymakers and other stakeholders in the fight against poverty are able to visualize those poor who are otherwise hidden behind the averages of large regional aggregations. As already mentioned, the knowledge of poverty incidence at a detailed spatial scale can improve the geographical targeting of interventions to improve people’s lives. Policymakers can draw on this information when planning public investments in education, health, sanitation, water, transport, and other sectors. In addition, poverty maps can be combined with other available geographically disaggregated data – e.g. geographic databases of transport infrastructure, public service centers, access to input and output markets, information on natural resources quality and natural disasters – to yield a rich array of information relevant for poverty analysis and policy making. Finally, it can assist communities in the development of local poverty reduction strategies. It provides local stakeholders with the facts that are required for local decision making and for negotiation with government agencies. Poverty maps thus become an important instrument for local empowerment.

2.3 External Environment

World oil prices are expected to fall next year after peaking this year. World oil price this year is expected to average at around US\$65 per barrel¹⁶, which represents another 21.7 percent increase from last year's level (see Table 6). After increasing continuously since 2003, world oil prices are now more than double that of the 2003's level. Looking forward, oil prices are expected to gradually decline to US\$60 in 2007 and to US\$56 in 2008. However, the market remains vulnerable to concerns about politically driven disruptions of supply or unexpected supply and demand shocks.

Despite the decline in oil prices, the global economy next year is expected to slow down from this year. This year, world real output growth has increased from that in 2005 with higher growths in the Japanese and the EU economies, while the US economy grew at about the same rate as that of last year (see Table 8). Next year, however, the world output growth is expected to slow down. This is mainly due to the slow down of the US economy, while the output growths of the Japan and the EU will slow down as well. Outputs of the developing region will also expand at a slower rate next year, including China's and India's. As a result, next year, output growth is expected to slow down across all regions around the world.

World trade volume growth which has sped up this year will also decelerate next year. Along with the higher global output growth this year, world trade volume has expanded by 9.7 percent this year compared to 7.5 percent last year. However, its growth expected to slow down next year to with the deceleration of the global economy. This will have an adverse impact on Thai exports for which the US, Japan, and the EU are key destinations.

The electronics and high-tech products market remain uncertain next year. The world wide semiconductor sales were very robust this year with growth spreading over a wide range of semiconductor products, reflecting good growth in end markets. However the Semiconductor Industry Association (SIA) noted that worldwide sales bookings by North American semiconductor equipment machinery industry have moved a little lower in recent months, causing the book-to bill ratio to fall from 1.14 in June to 1 in September this year. Taken in conjunction with the SIA's report that capacity utilization in the semiconductor industry is expected to remain high at 95 percent for the rest of the year, the weakening semiconductor machinery orders may suggest that semiconductor manufacturers are expecting a downturn in final demand for their products and therefore do not think it worthwhile to invest in additional capacity¹⁷.

Inflation in the G-7 countries has risen this year but will decline slightly next year in line with decline in the oil prices. Inflation in the G-7 countries has risen from 2.1 percent last year to 2.5 percent this year and is expected to ease to 2.1 percent next year. Prices of Thai exports to these countries can therefore be expected to increase by less than this year.

However, the prices of manufactured exports from major developed economies are expected to rise next year. The manufactures unit export value index, a measurement of the prices of manufactured exports from major developed economies, have increased by 2.4 percent this year and will continue to increase by 3.8 percent next year. This would raise the price of capital goods that Thailand imports from the developed countries next year.

¹⁶ Simple average of Dubai, Brent, and West Texas Intermediate (WTI)'s prices.

¹⁷ Source: World Bank East Asia Update, November 2006

Non-oil commodity prices which has been rising rapidly since 2003 will likely decline next year. World non-oil commodity prices have risen by 20.6 percent this year, the highest rate since 2003. Prices of Thailand's key agricultural commodities such as rice and

rubber have risen by 6.5 and 49.8 percent, respectively. Next year, however, world non-oil commodity prices are expected to fall by 4.5 percent, with rubber prices declining by 7 percent, while rice prices increase by less than that of this year.

Table 8. Global Environment Outlook
(percentage change from previous year, except interest rates and oil price)

	2004	2005e	2006f	2007f
<i>Global Conditions</i>				
World Trade Volume	10.4	7.5	9.7	7.3
Consumer Prices				
G-7 Countries ^{a,b}	1.8	2.2	2.5	2.1
United States	2.7	3.4	3.4	2.5
Commodity Prices (USD terms)				
Non-oil commodities	17.5	13.4	20.6	-4.5
Oil Price (US\$ per barrel) ^c	37.7	53.4	65.0	60.0
Oil price (percent change)	30.6	41.5	21.7	-7.7
Manufactures unit export value ^d	6.9	0.8	2.4	3.8
Interest Rates				
\$, 6-month (percent)	1.6	3.6	5.4	5.7
€, 6-month (percent)	2.1	2.2	3.0	3.6
<i>Real GDP growth^e</i>				
World	4.1	3.5	3.9	3.3
Memo item: World (PPP weights) ^f	5.2	4.7	5.1	4.5
High income	3.3	2.7	3.1	2.5
OECD Countries	3.2	2.6	3.0	2.4
Euro Area	2.0	1.4	2.3	1.9
Japan	2.7	2.6	2.9	2.4
United States	4.2	3.2	3.3	2.4
Non-OECD countries	6.4	5.7	5.5	4.6
Developing countries	7.2	6.5	6.9	6.3

Source: World Bank, October 3, 2006

Note: PPP = purchasing power parity; e = estimate; f= forecast

a. Canada, France, Germany, Italy, Japan, the UK, and the United States

b. In local currency, aggregated using 2000 GDP Weights

c. Simple average of Dubai, Brent and West Texas Intermediate

d. Unit value index of manufactured exports from major economies, expressed in US dollar

e. GDP in 2000 constant dollars; 2000 prices and market exchange rates

f. GDP measured at 2000 PPP weights

2.4 Export Performance

Exports

Exports are the major contributor to Thailand's economic growth this year.

Given the sluggish growth in consumption and investment, exports are likely to be the engine of growth in 2006. The recent forecast of economic growth of Thailand's major export destinations has shown a favorable factor supporting export growth this year with the weighted average growth rate of 4.9 percent in 2006 compared to 4.5 percent in 2005. However, a possibility of slower-than-expected economic growth of the US¹⁸ and China, Thailand's major markets, together with the appreciation of the real effective exchange rates since June 2005, would restrain Thailand export growth to some extent in the coming year. So far, the appreciation of the real effective exchange rate has not appeared to restrain Thai exports since exchange rates of our neighboring countries are also on the upward trend.

Exports next year will unlikely expand as much as it did this year.

Export volume for this year will grow by almost 9 percent with values expanding by around 18 percent. The top three Thai exports remain to be non-electrical machinery and parts (HS84), electrical machinery and equipment (HS85), and vehicle and parts (HS87). The main markets are the US, Japan, and EU. As the global environment is quite uncertain next year with world trade volumes expected to decelerate as well as growths of the economies of Thailand's key trading partners (see

¹⁸ If the US economy slowed down, Thai exporters would be affected directly as US are the major export destination with export share equal to 15% in 2005. At the same time, there would be an indirect effect through Thai exports to China since Thai manufacturers have supplied raw materials and parts to assembly in China before it would be exported to the US. During 2000-2004, exports to China accounted for 6% of Thailand's total exports while Chinese exports to the US accounted for 21% of total Chinese exports.

External Environment section), the export of goods next year is expected to also decelerate. Moreover, tax exemptions for Thai exports to the US under the Generalized System of Preference (GSP) will expire at the end of this year, while the Thailand-US bilateral free trade agreement (FTA) negotiations have been delayed. Thai exports to the US that receives GSP amount to roughly 20 percent of the total value of Thai exports to the US¹⁹. The expiration of the GSP will therefore negatively affect Thai exports to the US, which accounts for roughly 15 percent of total Thai exports, at least until the Thailand-US FTA is agreed. Similarly, the Thailand-Japan free trade agreement which were planned to be signed this year could be delayed until next year. Export quantity of goods next year is therefore expected to grow by around 5.5 percent and values by 13 percent. Below we examine Thailand's over all export performance in the first three quarters of this year as well as its exports to China.

Exports this year grew resiliently despite a slowdown in export prices.

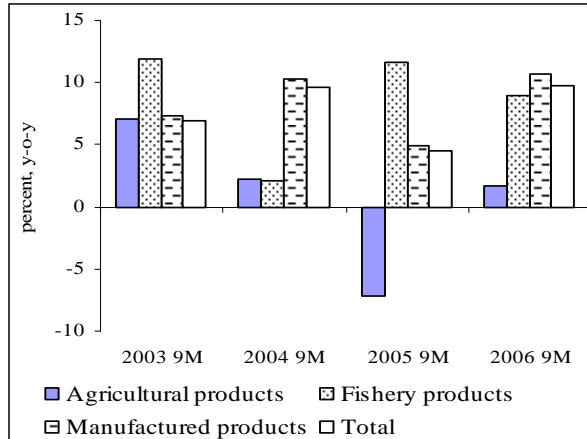
Exports value in the first nine months of this year expanded significantly by 16.6 percent, about the same as that of last year's. This expansion was supported by 9.7 percent increase in export volume due mainly to a low base in agricultural and manufactured export volume in the first half of last year due to drought and global down turn in the electronics cycle, respectively (see Figure 14). Export prices this year grew by 6.3 percent, only half of last year's rate (See Figure 15). In comparison to other neighboring countries, Thailand's export performance in the first half of 2006 grew at 19 percent, slower than those neighboring

¹⁹ There are currently 1,381 products (at 6-digit HS code) that receives GSP, which has partly supported Thailand to be competitive against Malaysia, Taiwan, and Hong Kong, which are Thailand's key competitors in these products in the US market, and are subjected to around 1-3 percent tariff for these products.

countries but outpacing those of Eastern European countries. Philippines, Taiwan, and Indonesia, however, performed well over other

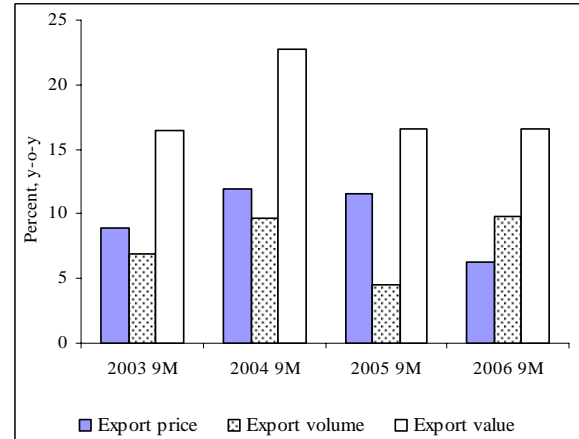
countries in the region with the export growth rates of over 30 percent (See Figure 16).

Figure 14. Export Volume Growth, 9M 2003-9M 2006



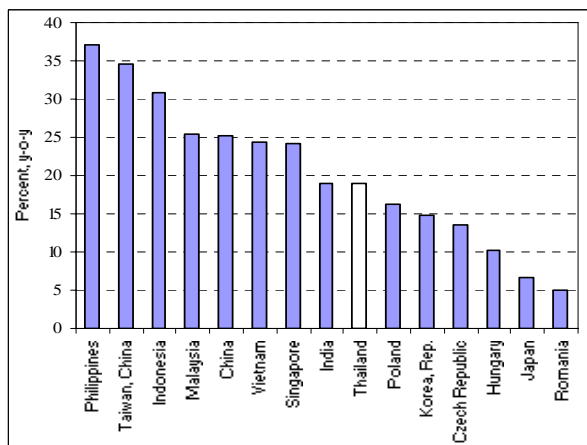
Source: BOT

Figure 15. Export Growth in price, volume, and value in the first nine months of 2003 to 2006



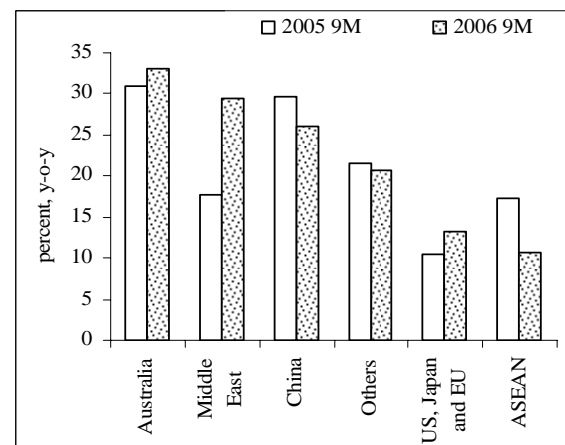
Source: BOT

Figure 16. Growth Rates of Country's Exports to World Market in US dollar terms, January to June 2006



Source: DOT

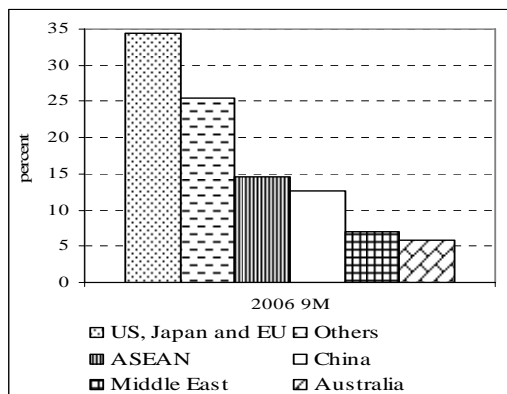
Figure 17. Export Growth Rates to Various Markets in the first nine months of 2005 and 2006



Source: BOT

In the first nine months of this year, exports to traditional markets remained buoyant. Export expansion to the traditional markets except Japan increased significantly from last year's rates and thus contributing around 34 percent to total export growth. As for regional export destination, exports to ASEAN and China grew moderately and contributed almost one third of total export growth (see Figure 17 and Figure 18). It is noteworthy that exports to new potential markets like the Middle East and Australia indicated a favorable performance with growth rates over 30 percent each²⁰. However, their export shares accounted for only 8 percent of Thailand's total export.

Figure 18. Contribution to Export Growth by Various Markets in the first nine months of 2006



Source: BOT

Agricultural exports recovered significantly due to better production and favorable commodity prices, while manufactured exports grew moderately. Agriculture export value during January to September 2006 grew by 26.1 percent relative to 0.9 percent last year's (see Table 9). This export expansion was due partly to the better weather condition and rising prices of Thailand's major

²⁰ In this period, the major export products to the Middle East are vehicle and parts (HS87), non-electrical machinery and parts (HS84), and cereals (HS10) while those to Australia are vehicle and parts (HS87), non-electrical machinery and parts (HS84), and jewelry (HS71).

commodity exports²¹. Rubber prices, for example, increased by almost 55 percent year-on-year, leading to a large value increase in rubber exports in the first 9 months of this year. Exports of manufacturing sector, however, growing at 15.4 percent was lower than last year's 17.8 percent. This is due to the significant slow down in the growths of vehicle and parts exports this year.

Among the top ten Thai exports, the exports of vehicles and parts and non-electrical machinery and parts slowed down this year while that of rubber and electrical machinery and equipment sped up. Non-electrical machinery and parts, Thailand's top exports slowed down slightly from last year (see Table 10). Growth of vehicles and parts, Thailand's third top export, slowed down by half that of last year, thus pulling down total exports growth this year. On the other hand, export value of rubber (HS40) grew robustly by almost 46 percent in the first three quarters of this year as a result of the higher export prices and strong demand from its major markets²². Exports of electrical machinery and equipment (HS85) started to recover after last year's downturn in the global electronic cycle. The recovery comes mainly from its exports to new emerging destinations like China and India, which grew by 42 and 41 percent, respectively, and accounting for 8 percent of total exports of HS85²³.

²¹ Agriculture production in GDP grew by 5.9 percent in the first half of 2006 compared to -6.7 percent in the first half of last year. In addition, world market prices of Thailand's major export products e.g. rubber (Singapore) and rice (Thailand, 5%) rose by over 54.2 percent, y-o-y, and 6.5 percent, y-o-y, respectively, during the first nine months of 2006.

²² Export volume of rubber (HS40) reduced by 0.5 percent in the first nine months of this year, however, the average price of rubber (Singapore) increased by 54.2 percent, y-o-y, during this period. In terms of export destination, rubber exports to China, Japan, and Malaysia increased by 69%, 42%, and 53%, respectively. These markets accounted for 57 percent of Thailand's total rubber exports.

²³ However, exports to traditional markets except EU market were sluggish such that exports to Southeast Asia grew by 1%, Japan by 3% and the US by 0.2%, respectively.

Table 9. Contribution to Export Value Growth Classified by Sector in the first nine months of 2005 and 2006

(Percent)

	9M 2005			9M 2006		
	Export share	Export growth	Contribution to export growth	Export share	Export growth	Contribution to export growth
Agriculture 1/	8.8	0.9	0.6	9.5	26.1	14.0
Manufacture	88.0	17.8	95.0	87.2	15.4	82.7
Resource based products	10.2	13.9	8.9	9.9	12.9	8.0
Others manufacture products 2/	77.8	18.3	86.1	77.3	15.8	74.7
Others 3/	3.2	23.6	4.4	3.3	17.0	3.4
Agriculture and resource based products	19.0	7.5	9.4	19.4	19.0	22.0

Source: BOT

1/ including crops, fisheries and forestry.

2/ including labor intensive and high-tech products.

3/ including mining, sample & other unclassified goods, and re-exports.

Table 10. Thailand's Top Ten Export Products in the first nine months of 2005 and 2006

(Percent)

No.	HS. code	Description	9M 2005			9M 2006		
			Share	Growth	Contribution to export growth	Share	Growth	Contribution to export growth
1	84	Non-electrical machinery and parts 1/	17.4	24.5	24.3	18.2	23.0	22.7
2	85	Electrical machinery and equipment 2/	19.2	3.9	5.1	17.8	9.1	9.9
3	87	Vehicle and parts	7.3	44.2	15.9	7.6	22.7	9.4
4	40	Rubber and articles thereof	5.5	14.4	4.9	6.8	45.5	14.1
5	27	Mineral fuel oil wax	4.2	53.8	10.5	5.1	42.3	10.2
6	39	Plastics and articles thereof	5.4	37.8	10.5	5.0	9.3	2.8
7	16	Preparation of meat fish	3.0	21.1	3.6	3.0	19.1	3.2
8	71	Pearls, precious stones and metals	2.8	19.7	3.3	2.8	18.5	2.9
9	10	Cereal	2.1	-13.2	-2.3	1.9	5.2	0.6
10	29	Organic chemical	1.8	37.9	3.5	1.9	22.6	2.3

Source: MOC

1/ Top 5 exports under this code are HS8471 hard disk drive, HS8473 parts of office machines, HS8415 air conditioning machines, HS8418 refrigerators, and HS8414 air or vacuum pumps, air or other gas compressors and fans.

2/ Top 5 exports under this code are HS8542 electronic integrated circuits, HS8528 reception apparatus for television, HS8534 printed circuits, HS8541 semiconductor devices, and HS8517 electrical apparatus for telephone.

Exports to China

Thailand's exports to Chinese market performed better than last year. In the first nine months of 2006, China's total imports increased by 21.6 percent while imports from Thailand increased by 28.2 percent compared to 20.1 percent in the same period of last year²⁴. In comparison to ASEAN-6 members, Thailand performance surpassed all others except Philippines (see Figure 19). The resilient exports to China is supported by its strong real GDP growth of 10.9 percent in the first half of 2006, driven mainly by net exports and investment, despite the Chinese government's attempts to slowdown its economy²⁵. A possibility of Yuan further revaluation would support the export expansion to the market in the remaining of the year. So far, Thailand has increased its dependency on Chinese market in the past ten years as the average share of exports to China increased from 2.7 percent in 1994-1996 to 6.5 percent in 2002-2004.

At two-digit HS code, exports of the top product (HS84) contracted while the others in the top ten performed well. Exports of non-electrical machinery and parts to China contracted by about 1.6 percent in the first nine months of this year even though Chinese imports of this category expanded by 14.5 percent, a recovery from a 4.4 percent import growth in January to September 2005. Thailand's major competitor in non-electrical machinery and parts are the US and Japan. China's imports of HS 84 from these 2 countries sped up from last year. Nevertheless, exports of other products in the top ten performed well, in particular rubber exports

which grew over 75 percent as a result of higher demand in automotive sector²⁶. However, there was a slight slowdown in exports of plastic and its products (HS 39), wood and its products (HS44), and copper and articles (HS74) (see Table 11).

After the implementation of tariff reductions under ASEAN and China FTA, the next step will be a negotiation on trade in services. Tariff reductions between the two have been implemented in three stages: in October 2003 for HS07-08, in January 2006 for HS01-06, and in July 2006 for HS09-97²⁷. In the first nine months of this year, Thailand ran a trade surplus on agricultural products under HS01-08 by US\$288 million, an increase from a trade surplus of US\$223 million in the equivalent period of 2005. However, Thailand had a trade deficit of US\$2.0 billion on the remaining products during January- September 2006. After the implementation of tariff reductions, the two parties have continued their work to enhance trade facilitation by reducing customs procedure and developing logistics system. In addition, they are preparing for further discussion on trade in services as well as investment.

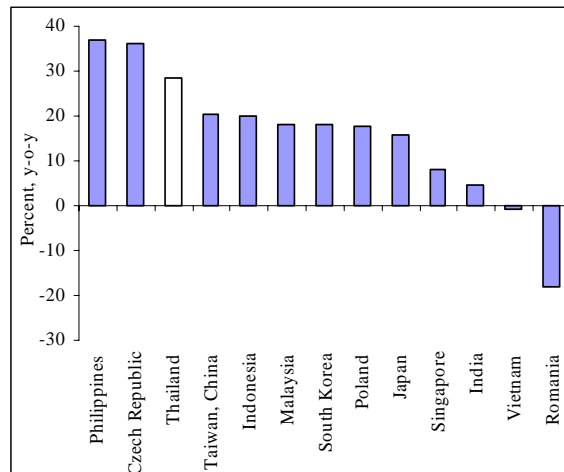
²⁴ Due to data availability, data on China's imports from countries was employed here to represent countries' export performance in Chinese market.

²⁵ China implemented a tighter monetary policy in April by increasing its benchmark one-year lending rate from 5.58% to 5.85% and in June and July by increasing its reserve requirement ratio from 7.5% to 8.5%.

²⁶ In the first half of 2006, automotive sector in China grew by 53.2% y-o-y.

²⁷ See detail in the previous issues of the Thailand Economic Monitor.

Figure 19. Growth rates of China Imports from Selected Countries in the Q1-Q3 2006



Source: WTA

Table 11. Thailand's Top Ten Export Products to Chinese Market in the first nine months of 2005 and 2006

(Percent)

No.	HS. code	Description	9M 2005			9M 2006		
			Share	Growth	Contribution to export growth	Share	Growth	Contribution to export growth
1	84	Nuclear reactors , machinery	29.1	65.8	50.0	22.5	-1.6	-1.8
2	85	Electrical machinery and equipment	12.9	26.4	11.7	14.4	41.8	19.8
3	40	Rubber and articles thereof	9.9	3.4	1.4	13.8	77.5	28.2
4	27	Mineral fuel oil wax	9.2	17.8	6.0	9.5	30.2	10.3
5	29	Organic chemical	5.0	31.2	5.2	8.9	125.5	23.1
6	39	Plastics and articles thereof	9.0	36.6	10.4	8.3	17.7	5.8
7	07	Edible vegetable	3.4	33.0	3.6	3.6	37.9	4.7
8	44	Wood & article	2.7	21.2	2.0	2.3	7.7	0.8
9	10	Cereal	1.5	-33.4	-3.3	2.1	73.8	4.2
10	74	Copper & articles	1.1	86.5	2.3	1.5	72.2	3.0

Source: MOC

2.5 Household Consumption

Household consumption continued slowing down this year as inflation, oil prices, and interest rates rose. Household consumption growth has been decelerating since 2004 as energy prices, which accounts for roughly 10 percent of consumer basket, has been continuously increasing since 2003. Retail petrol prices this year will rise by 20 percent year-on-year on top of the 30 percent increase last year. With the rapid rise petrol prices and

in inflation in the first half of this year, headline inflation should be around 5 percent for the whole year this year, as compared to 4.5 percent last year. Moreover, the decline in terms of trade, rise in lending rates and increased level of household debt has limited increasing household consumption growth this year. Farm incomes, which have sharply increased by more than 30 percent year on year in the first 9 months of the year, have

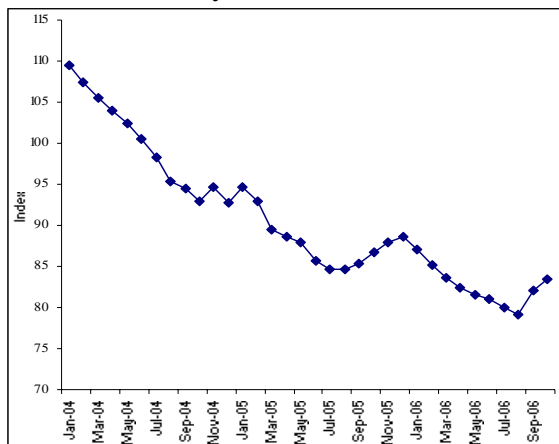
helped support household consumption. Nevertheless, consumer confidence which has been falling since the beginning of the year only rebounded slightly after the change of government in September. Household consumption this year would therefore grow at around 4 percent, a deceleration from last year.

Household consumption could speed up slightly next year as inflation eases with the fall in oil prices. Next year, headline inflation should decline as world oil prices and retail energy prices fall. This could help raise consumer's purchasing power and consumer confidence. However, more modest farm incomes growth next year will not support consumption growth as much as it did this year. Lending rates which are higher than in the past few years coupled with the increased level of household debt would continue to limit the increases in household borrowing for consumption. Thus, household consumption growth next year may only accelerate slightly.

Overall consumer confidence this year is lower than last year's and household

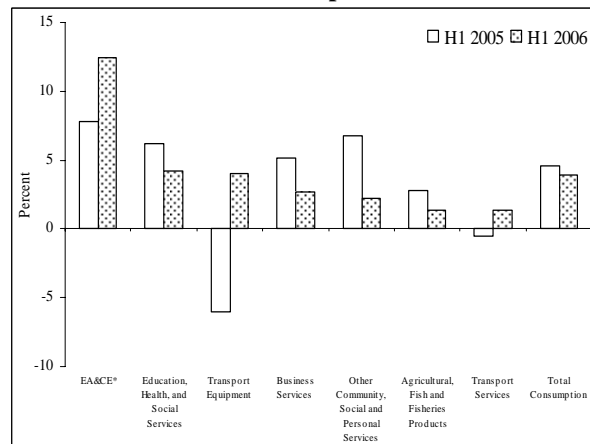
consumption slowed down particularly in the business and social services. The consumer confidence has been falling every month since the beginning of the year until August and only rebounded in September (see Figure 20). Household consumption decelerated to 3.9 percent in the first half of this year, compared to a 4.4 percent growth in the first half of 2005. This is mainly the result of the slow down in the consumption growths of the business services, health and education services, personal services and agriculture, forestry, and fishery products. Consumption of hotel and restaurant services, on the other hand, accelerated with the recovery of tourism after the tsunami disaster. Consumption of transport equipment and transport services growths also accelerated from negative growths last year (see Figure 21). Private consumption indices for the third quarter indicate higher year-on-year growths in household consumption as inflation eases (Figure 22). Household consumption in the second half of the year will therefore likely expand at least at the rate of the first half.

Figure 20. Consumer Confidence Index, January 2004-October 2006



Source: UTCC

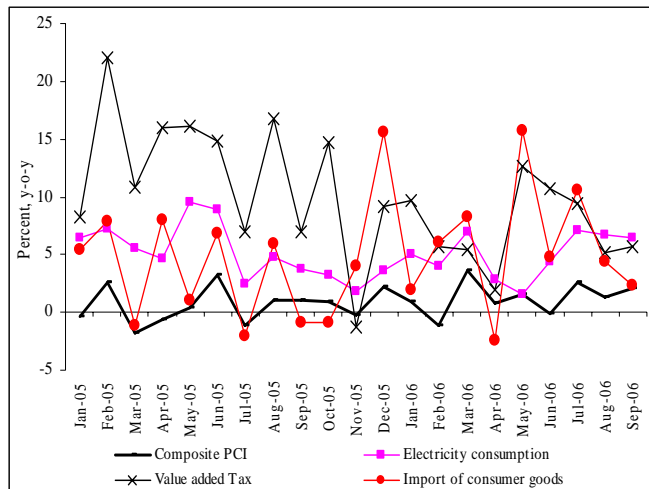
Figure 21. Growth of Household Consumption and Selected Components



Source: NESDB

* EA&CE is electrical appliance, radio, TV, and communication equipment

Figure 22. Growth of Private Consumption Index and Its Components, January 2005-September 2006

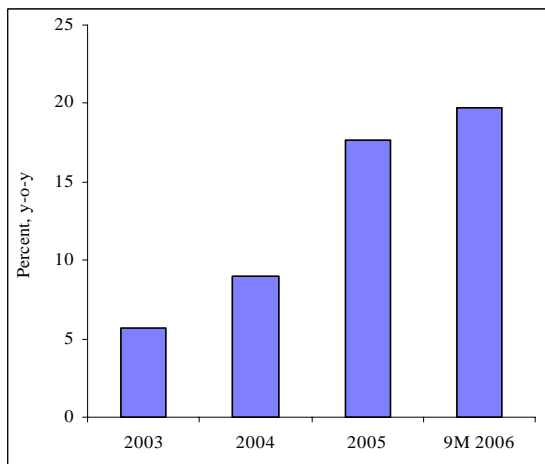


Source: BOT

Higher inflation has eroded households' purchasing power this year, but inflation should ease next year. With energy prices rising by almost 20 percent in the first 9 months of this year (see Figure 23), headline inflation has risen to almost 6 percent, which is the highest since 2002. Although the retail petrol prices have started to fall since August, retail petrol prices for the whole year would

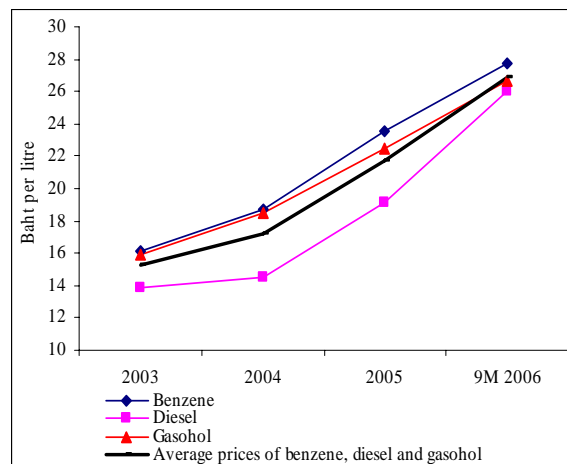
still be almost 20 percent higher than last year's (see Figure 24). Headline inflation would be close to 5 percent for the whole year as compared to 4.5 percent last year. Inflation is, however, expected to ease to around 2.5-3.5 percent next year as world crude oil prices are forecasted to fall by almost 8 percent (see External Environment Section). This would help raise household's real purchasing power.

Figure 23. Growth of Energy Prices, 2003-9M 2006



Source: BOT

Figure 24. Price Level of Benzene, Diesel and Gasohol, 2003-9M 2006



Source: EPPO

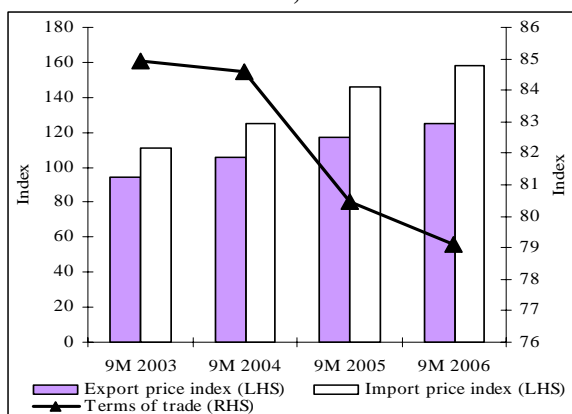
Moreover, household's purchasing power has also been affected by a further decline in terms of trade. Terms of trade has been continuously declining since 2003. Terms of trade in the first 9 months of this year fell by 2 percent from the same period last year. Import price rose by 8 percent, with the rapid rise in import prices of oil in the first half of the year. Export price, on the other hand, rose by only 6 percent (see Figure 25). Terms of trade will unlikely improve much next year. Although oil prices are expected to decline, but prices of manufactured imports, including machinery, from developed countries are projected to increase by more than this year's. On the other hand, export prices could likely decline as agricultural commodity prices and inflation in developed countries which are Thailand's key trading partners are also expected to decline (see External Environment Section).

Higher lending rates and household debt will limit rapid expansion of household consumption. In the first 9 months of this year, lending rates this year averaged at 7.5 percent, which is the highest since 2002 (see Figure 26). The rise in lending rates is in line with the rise in the Bank of Thailand's policy rate, which has been raised with the rise in inflation this year. The rise in interest rates has posed a higher burden on household debt, which has increased from 40 percent of annual

disposable incomes in 2000 to almost 60 percent in 2004. This has limited sharp increases in additional household borrowing for consumption as seen in the decline in the growth of commercial bank loans to households from 24 percent in 2005 to 18 percent this year. Lending rates may slightly ease next year as inflation falls. Nevertheless, the existing stock of household debt would limit the ability of households to acquire large additional debts.

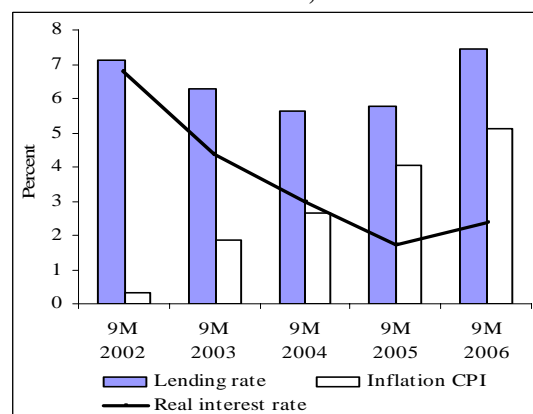
The sharp rise in farm incomes has helped support household consumption growth this year but may not do so next year. Farm incomes have risen by around 35 percent year on year in the first 9 months of the year on top of 18 percent growth last year. This has been the result of a rebound of production from that of last year and the robust increase in crop prices (see Figure 27). This has helped support consumption growth especially for households in the rural areas. However, next year, the increase in Thailand's key crop prices are projected to be significantly less than this year (see Table 12) while production, coming from a higher base this year, would unlikely grow as much as this year. Hence, farm incomes would expand by less than this year's and would not support household consumption growth as much as it did this year.

Figure 25. Export Price Index, Import Price Index and Terms of Trade, 9M 2003-9M 2006



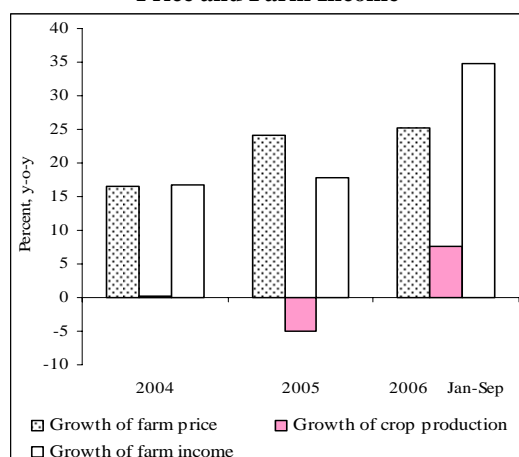
Source: BOT

Figure 26. Nominal Interest Rates, CPI Inflation, and Real Interest Rates, 9M 2002-9M 2006



Source: BOT

Figure 27. Growth of Crop Production, Farm Price and Farm Income



Source: BOT

Table 12. Thailand's Key Crop Prices 2005 and 2006

	Weights*	Growth Rates of Crop Prices		
		2005	2006p	2007p
Rice indic 5%	36.6	20.4	6.5	3.3
Rubber, Singapore	17	15.2	49.8	-6.9
Maize	4.4	-11.7	11.5	9.1
Palm oil	2.9	-10.4	4.2	0.2
Coconut oil	1.8	-6.6	-2.8	-4.5
Coffee, robusta	1.1	40.5	18.4	-3.4
Weighted average		13.3	12.9	0.5

Source: World Bank

Note: p= projected

2.6 Investment

Investment growth has slowdown considerably this year. Investment this year grew at lower than 5 percent, the lowest since 2002. This is mainly attributed to the sharp slow down in private investment from last year as oil prices continued rising as well as interest rates. Investor's confidence has been hurt by the uncertain political uncertainties and the delay in public investments. Public investments growth this year is only half that of last year as disbursements on central government investment as well as the implementation of the mega-project investments are delayed due to political uncertainties.

Investments will likely pick up, but only slightly as uncertainties remain while supply side constraints are limiting private investment growth. Public investment should speed up next year as the central government

budget will be disbursed for the whole year. Mega-projects, however, will not be disbursed as planned as the government is carefully revising them. Private investments are also somewhat affected by this delay as well as by the high oil prices that would continue into next year as well as higher real interest rates and exchange rate appreciation. Moreover, uncertainties surrounding policies such as foreign share holding regulations and free-trade agreements are holding back investments, particularly, of foreign investors. Constraints to investment such as regulatory burden and lack of skills which have been cited by firms will further limit firm's investment and so does price controls. Private investment next year should therefore speed up but not significantly and would be concentrated in those industries where capacity utilization is more than 80 percent.

2.6.1 Private Investment Section

Private investment is expected to grow by no more than 5 percent this year and next year. Private investment this year continues to slow down from last year as investors have seemed to be delaying their investments since last year. BOI approvals, which would on average be translated into actual investments in 2-3 years, increased by more than 75 percent in 2003 and 2004 (see Table 13). However, private investment has been slowing down since 2004 (see Figure 21). In the light of policy uncertainties and the expected slow down in exports in the second half of this year and next year, businesses are not likely to speed up their investments even though capacity utilization are close to pre-crisis levels. In addition, high energy prices, higher interest rates, continued appreciation in the real exchange rate and delays in public spending, which are discussed in turn below, will not lend strong support to private investment this year and next. Private investment this year expanded by 5.4 percent in the first half and will grow by only 4.6 percent the whole year. Next year, private investment growth could slightly accelerate to 5 percent as some of the industries with greater than 90 percent capacity utilization will need to make investments.

Private investment growth this year continues to slow down from that of last year with deceleration in both equipment investment and construction growths.

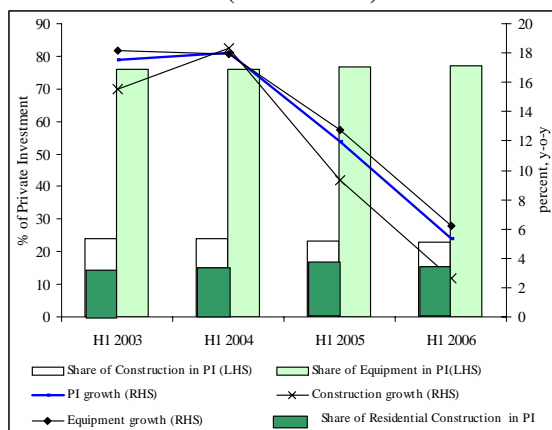
Private investment in the first half of this year registered only 5.4 percent growth compared to 12.0 percent in the first half and 10.4 percent in the second half of last year, respectively. Both investments in equipment and construction decelerated sharply (see Figure 28). The slowdown in equipment investment and factory construction are in line with the deceleration of the manufacturing production growth since 2004 and the accompanying slow rise capacity utilization rates (see Figure 29). Manufacturing production in the first 9 months of the year has further slowed down from the same period last year due to the deceleration in the production for exports (see Table 14). Residential construction has also slowed down significantly from a 13 percent expansion last year to only around 3 percent in the first half of this year. Private investment indices indicate a rebound in private investment in both construction and equipment in the third quarter as cement sales and real imports of capital goods increased year on year, but their growth rates are still below those of last year or the first quarter of this year (see Figure 30). The slow down in private investment in the second half of the year will result in the whole year's growth of around 4.6 percent.

Table 13. BOI Approvals by Sectors

	2002	2003	2004	2005	2005 (Jan-Oct)	2006 (Jan-Oct)
Total (Billion Baht)	162.5	283.8	600.8	571.3	486.3	260.8
Agriculture	24.9	10.6	9.5	6.3	4.6	8.6
Mining, ceramics and base metal	1.3	6.0	10.7	18.4	26.1	1.0
Light industry	11.4	4.5	3.1	2.2	2.2	3.5
Metal products, machinery and transport equipment	17.5	24.5	12.5	25.5	29.5	13.2
Electronics and electrical appliance	18.1	15.6	15.7	15.6	11.0	18.0
Chemical, paper and plastic	10.5	17.4	20.3	9.7	6.1	39.6
Services and infrastructure	16.4	21.4	28.3	22.2	20.4	16.2

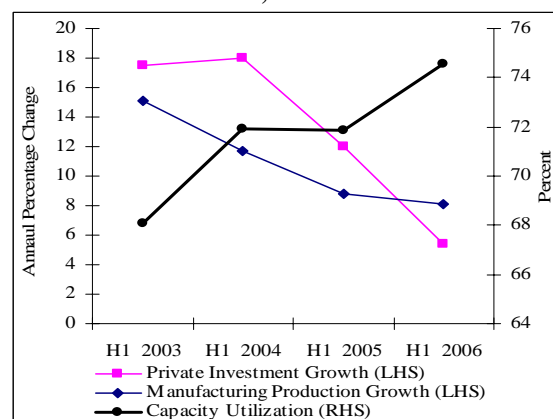
Source: BOI

Figure 28. Private Investment Growth and Contributions to Real Private Investment (out of 100%)



Source: NESDB

Figure 29. Private Investment Growth, Manufacturing Production Growth, and Capacity Utilization, H12003-H12006



Source: BOT and NESDB

Table 14. MPI Growth by Export Content (Percent)

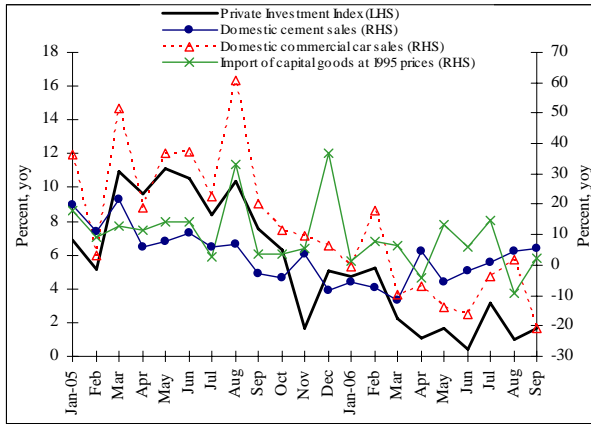
	Weight	9M 2003	9M 2004	9M 2005	9M 2006
MPI growth	100.0	13.9	12.0	9.7	7.5
Export < 30% of total production	34.0	17.0	10.6	0.6	5.9
30% < Export < 60% of total production	30.9	9.7	7.3	5.0	4.8
Export > 60% of total production	35.1	14.5	18.3	24.0	11.1

Source: BOT

Energy prices, rising rapidly again this year and remaining high next year, has dampened private investment growth. Electricity, fuel oil, and high-speed diesel are the main energy sources for firms. Their weighted prices have soared by 41 percent on top of 33 percent last year (see Figure 31). This is mainly because the prices of fuel oil and high-speed diesel have soared by 47 percent in the first half of the year compared to the first half of last year as world crude oil prices rose rapidly in the first half of this year, and Thailand had lifted the ceiling on petrol prices since July last year. The year-on-year rise in petrol prices eased in the second half of the year as world crude prices fall. Nevertheless, crude oil petrol prices averaged

at US\$ 65 per barrel this year. Next year, crude oil prices are expected to decline to US\$60 per barrel, or almost double the price in 2002. In an environment of high energy prices, firms in the Bank of Thailand's Monthly Business Sentiment Survey indicated that the high cost of production has been the major constraint to doing business in the first 8 months of this year. However, despite the higher costs of production, firms report that adjusting prices is difficult. This could be partly attributed to the price controls on more than 200 products that are currently being implemented. These have lowered firms' sentiments and ability to make additional investments.

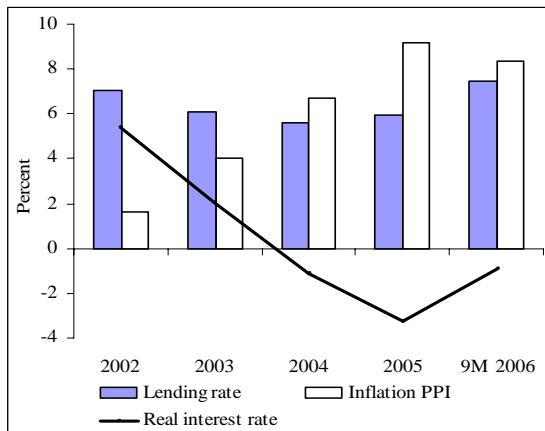
Figure 30. Private Investment Index and Its Components, January 2005- September 2006



Source: BOT

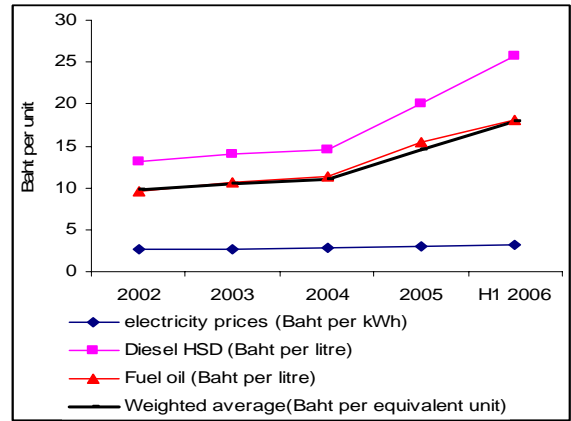
Nominal interest rates have increased by almost 2 percent this year and loans to businesses has stagnated. So far this year, the minimum loan rate (MLR) has averaged at 7.5 percent (compared to 5.9 percent in 2005), while the producer price index rose at a faster rate of 8.4 percent. Thus, real interest rate this year still remains negative but less than that of last year (see Figure 32). Commercial bank loans to the business sector grew slower at 4.4 percent compared to 4.9 percent last year (see Table 15). Loan growths particularly to the hotel and restaurant, real estate, and transportation businesses have slowed, while loans to the construction business declined from last year. Interest rates are expected to adjust downwards slightly next year as

Figure 32. Real Interest Rates (PPI adjusted), 2002-9M 2006



Source: BOT

Figure 31. Energy prices used by firm, 2002- H1 2006

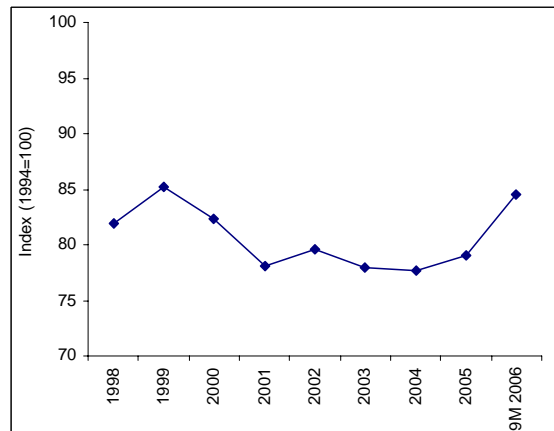


Source: EPPO and MEA

inflation eases. However, as oil prices decline, PPI is projected to decline by about 2 percentage-points from this year's. Hence, real interest rates would likely reach positive territory next year. With a rise in real interest rates next year, loan growth will unlikely rise by more than this year's.

Further real appreciation of the baht also has not helped private investment. The real effective exchange rate continues to appreciate this year from last year (see Figure 33). This would have an adverse impact on Thailand's exports on top of the slowing global demands in the second half of this year and next year. This would therefore not be a major supporter to private investment as in the pre-2005 years.

Figure 33. Real Effective Exchange Rate, 1998-9M 2006



Source: BOT

Table 15. Growth of Commercial Bank Loans*

(Percent)

	2005		2006	
	Share of Loans	Growth	Share of Loans***	Growth (Annualized)
Total Loans	100.0	8.0	100.0	4.4
Household Loans	18.4	24.0	19.6	18.2
Loans to Financial Institutions	12.5	5.0	11.2	-17.0
Business sector loans	69.1	4.9	69.2	4.4
Of which				
Manufacturing	26.5	4.7	26.6	5.6
Public Utilities	2.0	9.1	2.0	7.8
Construction	3.0	5.8	2.9	-2.2
Commerce	16.6	3.1	16.9	7.4
Hotel and Restaurant	3.7	9.9	3.7	5.8
Transportation	4.4	10.5	4.4	2.2
Real Estates	7.5	9.7	7.5	3.6
Others**	5.3	-4.0	5.1	-5.4

Source: BOT

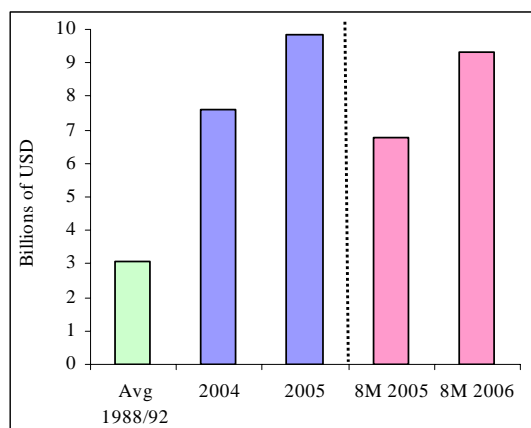
*All loans are unadjusted. **Including Agriculture, Fishery and Mining. ***Shares are as of June 2006

With delays in disbursements this year, public investment will not support private investment this year and next as much as it is expected to. By the end of this year, public investment is expected to grow by less than 5.5 percent (compared to 11.7 percent in 2005). This is due to the slower disbursements in both central government's and the state-owned enterprises' investment budgets (see Public Investment section) in the light of political uncertainties in the latter half of this year. The large direct and crowding-in impacts of public investment previously expected will therefore not happen this year. As some large public programs (also known as mega-projects) planned for next year will be reconsidered by the Cabinet, public investment next year will unlikely increase rapidly and thus will again have only modest impact on private investment next year.

FDI remains a key driver of private investment growth this year but may slow down next year as foreign investors wait-and-see. In the past few years, gross FDI has been increasing at a faster rate than total private investment (foreign plus domestic investment). Gross FDI inflows in 2005 increased by 20 percent while private

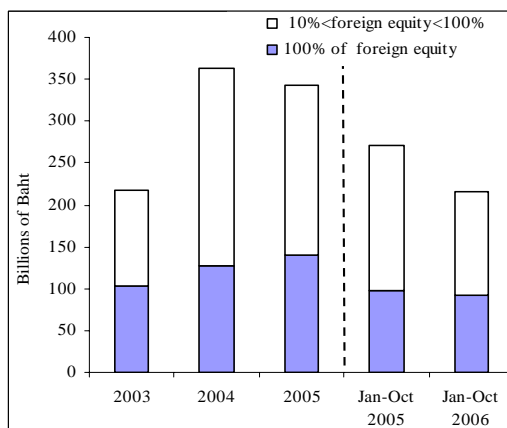
investment grew by 11 percent. This year, FDI growth in the first half of the year expanded by 48 percent, while total private investment increased by 5.4 percent. In the first 8 months of the year, gross FDI has increased by 37 percent (see Figure 34). This is in line with the sharp increase in BOI approvals of FDI since 2003 (see Figure 35). However, in the first 9 months of 2006, applications and approvals sharply declined from the previous year in particularly three sectors: mining, machinery and transport equipment, and services and infrastructure sectors (see Table 16). This could be an indication of lower foreign investors' confidence amidst political uncertainties in Thailand this year. This is also consistent with the JETRO's monthly survey of the business sentiment of Japanese companies in Thailand which shows that their sentiments have been declining since after the April elections this year. FDI inflows next year may see a slow down as foreign investors await clarity in policy implementation, especially those involving foreign share holding regulations and also free-trade agreements.

Figure 34. Gross FDI Inflows, 2004-8M2006



Source: BOT

Figure 35. BOI FDI approvals



Source: BOI

Table 16. BOI Net Applications by Sectors

(Billion Bt)

	2003	2004	2005	2005 (Jan-Oct)	2006 (Jan-Oct)
Total Net Applications	304.7	637.2	685.6	630.9	424.8
Agriculture	34.2	53.1	39.7	31.7	37.4
Mining, ceramics and base metal	19.9	157.7	130	129.0	28.1
Light industry	17.8	12.2	14.7	12.3	14.4
Metal products, machinery and transport equipment	60.5	57.4	145.1	135.1	47.1
Electronics and electrical appliance	62.8	82.6	86.4	77.1	60.6
Chemical, paper and plastic	56	116	110.1	100.3	141.4
Services and infrastructure	53.6	158.1	159.6	145.5	95.8
Net applications by foreign firms and joint ventures	243.6	340.4	531.1	496.2	260.4

Source: BOI

Attention on reforms to improve Thailand's investment climate need to resume if private investment growth were to sufficiently pick up in the near future. As excess capacity is being exhausted, more investments are needed if Thailand were to avoid a supply constraint in the near future. Capacity utilization is now only 2 percentage-points lower than pre-crisis levels. Moreover, 13 industries which accounts for roughly 10 percent of manufacturing sector value-added production are running above 90 percent capacity utilization. However, firms have voiced that their investments are constrained by issues of regulatory burden, skills shortages,

and infrastructure deficiencies²⁸. Moreover, price controls are squeezing firm's margins as prices cannot be raised while production costs have been recently rising quickly with the hike in oil prices. Price controls are also constraining firm's productivity (see Box 2 Price Controls in Thailand). Addressing these constraints is therefore not only critical to raise the quantity of investments but also their productivity.

²⁸ A survey of 1,385 firms in 2004 for the *Thailand Investment Climate, Firm Competitiveness and Growth Study* (2006).

2.6.2 Public Investment

Public investment this year is expected to expand by 5.4 percent, a slow down from its exceptional growth last year. Last year, public investment²⁹ grew quite robustly at 11.9 percent in real terms or 19 percent in nominal terms, the highest growth since the 1998. This was the result of the previous government's policy last year to speed up the disbursement of central government investments. State-owned enterprise investments last year have also sped up owing primarily to the construction of the Suvarnabhumi Airport to meet its opening deadline this year as well as the purchase of 8 airplanes by Thai Airways International worth Bt40.8 billion baht (8 percent of total public investment last year). In addition to the high base effect of the exceptional growth in 2005, public investment growth this year is also slower due to the delays in central government investment disbursement this year due to cash management issues in the beginning of the year as well as the political uncertainties since the middle of the year.

Cash management issues as well as uncertain political situations had slowed down the Central Government investments this year. Government treasury bills (T-bills) are used as short-term financing instruments for government expenditures during the months before the revenue season arrives³⁰. However, since the beginning of fiscal year 2006, the outstanding Government treasury bills (T-bills) have reached its ceiling of Bt170 billion. Hence, the Government was not able to issue additional T-bills³¹ to fund

government expenditures except those to refinance existing ones that have matured. Disbursement of investments had to therefore be timed with revenues receipts, thus, delaying investments. The Government had resolved this issue in second quarter of the year by expanding the T-bill ceiling by Bt80 billion and subsequently issuing additional T-bills (excluding T-bills for refinancing) in the same amount. However, the uncertain political situation in the second half of the year and the change in government in late September have further delayed the disbursement of investments by the central government. As a result, the disbursement rate of capital expenditures for FY2006³² was around 75 percent.

Public investment next year will continue to grow at around 6 percent with the increase in central government and state-owned enterprise investment budgets, with higher disbursements rate expected for the central government investments. The Central government will run a Bt100 billion deficit which is roughly 1.2 percent of GDP this fiscal year. Out of the total Bt1.52 trillion budget this year, Bt395 billion was allocated for capital expenditures. This represents an 11 percent increase in capital expenditures compared to those allocated in the last fiscal year. However, the disbursement rate of the capital budget should be higher than last year as the budget will be disbursed for the whole year and the cash management issues are resolved. The Public Debt Management Office has plans to convert Bt128 billion worth of existing T-bills into government bonds this fiscal year.

²⁹ Total public investment includes investments by the central government, the local government, and the state-owned enterprises. Central government investment accounts for roughly a little less than half of total public investment, while state-owned enterprise investment generally accounts for half.

³⁰ The bulk of revenues from income taxes and corporate taxes are received in March, May, and August each year.

³¹ T-bills have a maturity of less than one year, so new T-bills are issued to refinance ones that are matured.

³² FY2006 runs from September 2005 to October 2006.

This would allow for the same amount for additional T-bills to be issued for short-term cash flow management purposes. State-owned enterprises investment budget for FY2007 has also increased by 4.5 percent. However, the disbursement rate for the state-owned enterprise investments may hover around 65 percent, similar to this year, as the planned mega-investment projects, which are primarily undertaken by state-owned enterprises, will be delayed as they will be reviewed by the current Government.

Mega investment projects³³, however, will be disbursed slower than planned, as projects planned for next year will be reviewed. The mega investment projects have been disbursing lower than planned since the beginning of this program in 2005. In 2005, only Bt35 billion or 2 percent of the 5-year Bt1,800 billion mega-project program was disbursed. In 2006, the *estimated disbursement* by state-owned enterprise on the mega-projects is Bt99 billion compared to the Bt290 billion planned. Similarly, it is estimated to be Bt140 in 2007 compared to the planned amount of Bt506 billion. This includes a fraction of the Bt 83 billion for the recently approved purple and red underground rail lines, of which construction will likely begin at the end of this year. The estimated disbursement of the mega-project investments would account for around 16 percent of the total public investment in 2005-2007 and around 15 percent of Bt1,800 billion³⁴. However, the disbursement next year will not meet the estimated amount as the current government will be reviewing some of the projects that have been approved. Given the delays in disbursements so far, it is unlikely that the mega-project investments will unlikely meet its disbursement target of Bt1,800 by 2009.

While the delay of the implementation of public investment projects to ensure that they are transparent and graft-free are beneficial for the country, a significant rise in public investments in the near future is no doubt needed to increase Thailand's competitiveness. Alleviating the infrastructure bottle neck is a key aspect in increasing private investments and their productivity. Public investments do not only have the direct effect of spurring related private investments, but also the indirect effect of lower operation costs for firms. Improved roads, ports, telecommunications, for example, reduce the overall logistic cost for firms. The 1,300 firms surveyed in the *Thailand Investment Climate, Firm Competitiveness and Growth*³⁵ study have also cited infrastructure bottle neck as one of the three top constraints to their operations and growth. It is therefore important that public investments are implemented in a timely manner while balancing on the issues of good governance of the projects.

³³ Mega investment project are public investments costing Bt 1 billion (US\$27 million) or greater.

³⁴ Source: Public Expenditure Review (2006) by Office of the Public Sector Development Commission

³⁵ A joint NESDB-World Bank study (2006)

2.7 Financial and Corporate Sector Developments

Banking Sector Developments

The non-performing loans (NPLs) figure remains in the single digit during the first half of 2006. As of June 2006, non performing loans (NPL) at financial institutions stood at Bt484.7 billion or 8.2 percent of total loans. This is an increase of 1.6 percent from December 2005, but a 17 percent decline from June 2005 (see Figure 36). The decline comes mainly from the small increase in NPLs in the first and second quarter, while the existing NPLs declined continuously (see Figure 37). NPLs declined in most economic sectors, especially the real estate sector. The exceptions are the manufacturing, public utilities and commerce sectors.

As of June 2006, the number of financial institutions reduced to 55 from 58 in December last year. There are now 34 commercial banks and 21 finance companies, credit foncier, and state-owned specialized financial institutions. From December 2005 to June 2006, two finance companies were closed down, and one (GE Money Finance Public Company Ltd.) was granted a banking license. One commercial Bank, the UFJ Bank Ltd merged with the Bank of Tokyo-Mitsubishi and closed on 1 January 2006.

Over all, performance of Thai banks has improved slightly during the first half of 2006. As of June 2006, prevailing interest margins of the Thai commercial banking sector for the first six months of the year were at 1.6 percent while return on asset (ROA) stood at 0.7 percent and return on equity (ROE) at 7.5 percent reflecting the overall strengths of the sector. However, discrepancies in performance exist among financial institutions with small banks reporting higher ROAs than large and medium banks. Profitability and capital adequacy ratios of medium banks were not as good as those of the large and small banks, but their NPL ratios were lower than those at larger and smaller banks, which meant stronger asset quality. The capital level of small banks was quite strong with average tier-1 capital of 18 percent of total risk assets. The margins have gone up slightly in the first half of the year primarily even though funding costs in the first half of the year appear to have gone up substantially, but it is not known if this trend will continue throughout the year (see Table 17).

Table 17. Indicators of the Health of the Commercial Banking Sector

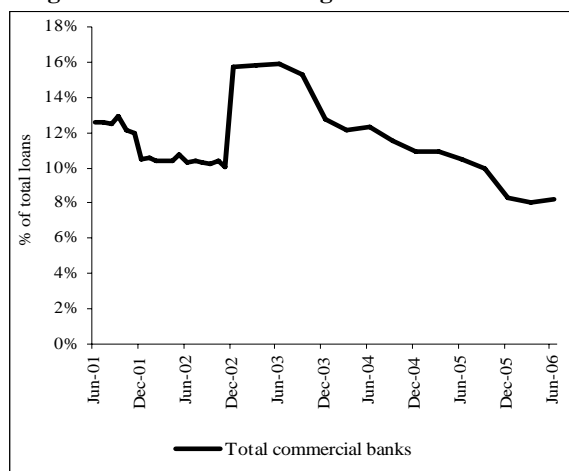
(Percent)

	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004	Dec. 2005	Jun. 2006*
Interest margin	1.6	1.8	2.0	2.5	2.9	1.6
ROE	32.8	4.2	10.5	16.8	16.5	7.5
ROA	1.5	0.2	0.7	1.2	1.4	0.7
Pre-provision profit to assets	0.4	1.0	1.4	1.7	1.9	1.1
Provision expenses to assets	0.6	0.7	0.7	0.5	0.4	0.2
Total capital adequacy ratio	13.3	13.0	13.4	11.9	13.2	13.5
Tier-1 capital	8.9	8.9	9.6	9.0	10.0	10.4
Equity to total assets	5.0	5.5	7.1	7.7	9.0	8.9

Source: BOT

* Figures for June 2006 are preliminary.

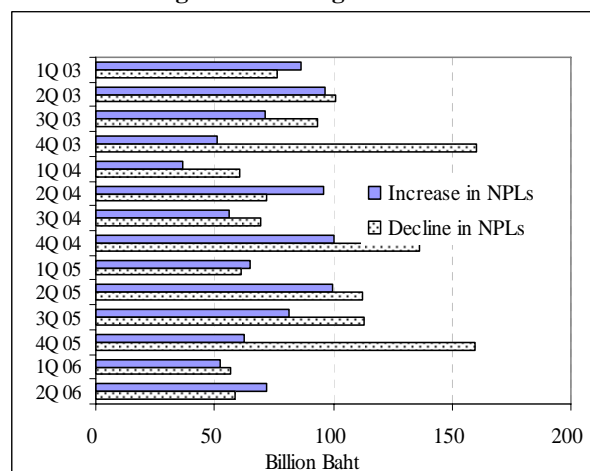
Figure 36. Non-Performing Loans 2001-June 2006



Source: BOT and World Bank’s estimates (2nd quarter 2006 are preliminary data)

Note: As of June 2006, the BOT no longer publishes private commercial bank NPLs and state-owned banks’ NPLs separately.

Figure 37. Changes in NPLs



Source: BOT and World Bank’s estimates (2nd quarter 2006 are preliminary data)

Table 18. Average Interest Yields, Funding Costs, and Interest Margins of Thai Commercial Banks
(Percent)

	2004	2005	June 2006
Interest yield	3.8	4.3	2.7
Funding costs	1.2	1.3	1.2
Average spread	2.5	3.0	1.6

Source: BOT and the World Bank’s estimates

Excess liquidity in the banking system was estimated to be approximately 338 billion baht at the end of May 2006. The ratio of excess liquidity to total deposits was approximately 5 percent. The Bank of Thailand adjusted the calculation methodology after the January 2006³⁶. Based on the new concept, excess liquidity in the banking system declined considerably during the latter half of 2005 because the returns on liquid assets (both domestic and foreign assets) adjusted upwards in tandem with domestic and foreign policy rate hikes while the return on

bank loans (using MLR or the Minimum Lending Rate) rose to a lesser extent. However, around the beginning of 2006, excess liquidity was back on the upturn, though continuing to stay below the level in the corresponding period of 2005. The recent build-up of excess liquidity reflected the expansion of the banking system’s asset base, especially in the form of foreign assets due largely to foreign capital inflows.

Nevertheless, a couple of areas which could impact the overall bank performance should be closely watched. Even though the foreclosure numbers have reduced, which

³⁶ Source: Inflation Report July 2006.

could indicate a drop in non-performing loans, it should be watched in the longer term as interest rates increase. After having climbed during the last two years, the reported net foreclosed property numbers have declined from Bt185,727 million in December 2005 to Bt175,926 million in June 2006 or a decrease of 5.3 percent (foreclosed properties represented 2.4 percent of total assets in June 2006). A second area to be watched is operating expenses, which had dropped between end 1998 and end 2002, but since then have begun to rise. Operating expenses rose by 12 percent year-on-year in 2005 and figures for June 2006 show a further increase; if continued, this trend could impact the overall profitability of the banking sector and might be of concern given the trend of higher funding and salary costs going forward.

Corporate Sector Development

The performance of non financial listed companies in Q2 2006 was lower than that in Q2 2005. Return on capital employed (ROCE) and return on equity (ROE) was reduced due to the squeezed profit margins. ROCE of the non-financial listed companies decreased slightly from 19.2 percent in Q2 2005 to 18.9 percent in Q2 2006. Similarly, ROE also reduced by 2.4 percentage-points from Q2 2005 to Q2 2006 (see Table 19). The contraction in net profit margin from 10.2 percent to 8.5 percent was the main contributor to the slowdown due mainly to a reduction in net profit as a result of the high costs of production from energy prices. However, an 8.6 percentage-point increase in the asset turnover represents better production efficiency while the financial leverage remained stable as in the last period. In addition, stable return on asset also indicated that the ability to generate earnings from companies' investment remained the same in Q2 2006 relative to Q2 2005 but was better compared to that in Q2 2004.

Table 19. Corporate Financial Ratios (Listed Companies Including only Non-Financial Industry)

(Percent)

	2004				2005				2006	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Return on Capital Employed,	17.0	17.5	18.0	19.1	19.7	19.2	18.7	17.0	18.3	18.9
Return on Equity, ROE	20.5	21.2	21.2	22.2	22.6	22.2	21.9	18.9	19.4	19.8
Net Profit Margin	10.2	10.3	10.2	10.6	10.7	10.2	9.9	8.7	8.7	8.5
Asset Turnover	82.5	85.9	87.9	91.9	94.0	96.7	97.9	96.1	99.9	105.3
Financial Leverage (Times)	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.2
Return on Asset, ROA	12.3	12.8	13.0	13.9	14.1	13.9	13.8	12.4	13.3	13.8

Source: SET

2.8 Medium-Term Agenda for Growth and Poverty Reduction

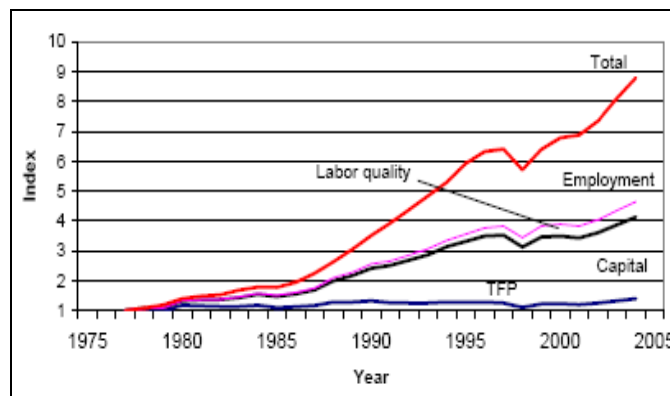
More of Thailand's economic growth will have to come from higher productivity growth and this will require a move towards a knowledge and innovation economy. The last issue of the Monitor highlighted the medium term characteristics of recovery – strong export and private consumption growth, but weak private investment – and discussed details of how private investment could be revived to sustain strong growth. In the past, when sustained expansion of capital and labor inputs, and increases in average years of schooling were sufficient to generate annual average overall growth-rate of 8 percent (1977-96) and 10 percent manufacturing growth rate (1977-96). But in the future, scope for additions of capital and labor will be more limited and such additions alone cannot sustain such growth-rates; sustaining annual average rates of 6 percent will be a challenge, but it's a rate that will be needed to eliminate poverty and reduce inequality.

Total factor productivity (TFP) growth within manufacturing and service sectors will have to contribute much more. Over two decades (1977-96) aggregate TFP growth

averaged 1.6 percent a year, and most of this was generated through *reallocation of labor* from lower-productivity agriculture to the higher productivity manufacturing sector. Actual TFP growth *within* manufacturing sector was much smaller (see Figure 38) and in agriculture was negligible. This pattern of dependence on inputs or on labor reallocation would be difficult to sustain going forward, as the scope for these has become limited. Unless there are significant increases in TFP growth *within* the manufacturing and service sectors, the overall rate of income and output growth in Thailand will have to be much slower than in the past.

But within-sector TFP growth is generally much more dependant on domestic innovation and technological developments in the sectors. Many years of FDI inflow and capital goods imports have brought Thailand closer to the world technology frontier, and thus most of the innovation in products and processes will have to come from Thailand. Even future FDI to Thailand will depend on the quality of available skills and potential for domestic innovation and value-addition, given the relatively higher labor costs.

Figure 38. Sources of Output Growth in Manufacturing Sector, 1975-2005



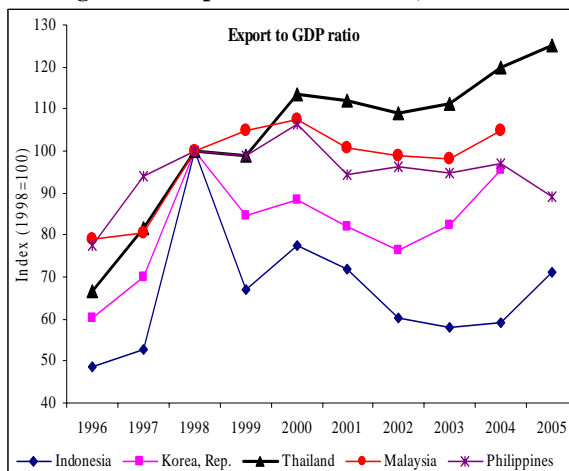
Source: Bosworth, B., *Economic Growth in Thailand: The Macroeconomic Context* (2005)

In addition, there is increasingly intense export competition in technology-intensive goods and services from countries like Vietnam, India and China. This raises questions about sustaining the strong growth and diversification of Thai export experienced over the last few years. This competition is a relatively new phenomenon, where countries with lower per capita income than Thailand compete successfully with Thailand on both labor-intensive and technology intensive goods. The composition of Chinese exports (see Table 20) show the rapid technological upgrading that China is undertaking, side-by-side with accelerated skill development of its labor force. By comparison, Thailand's upgrading was more modest (see Table 21). Similarly, Vietnam is now entering the automobile, the electronics (Intel has set up a \$300 million chip making plant) and the IT sector. India is already successfully producing, for several years, high-end services. These

countries have had significant development and growth of its science and technology professionals, which made it possible for them not only to compete in labor intensive exports but also in technologically sophisticated goods and services and attract foreign investments in these sub-sectors.

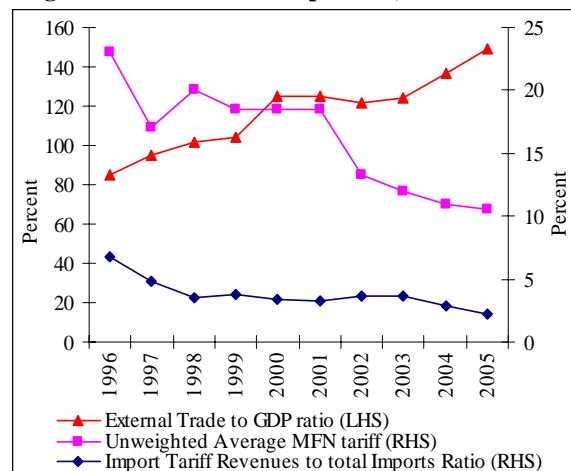
Thailand has become a more open economy since the crisis (Figure 39 and Figure 40), and thus goods produced for the domestic market are more exposed to competition. Lower income countries' exports are affecting the domestic market in the area of labor intensive goods like textiles, footwear, as well as rubber and plastic articles. Small and medium enterprises are feeling the pressure of this competition too.

Figure 39. Exports to GDP Ratio, 1996-2005



Source: WDI

Figure 40. Indicators of Openness, 1996-2005



Source: NESDB, MOC and MOF

Table 20. Export composition by factor intensity, 1994 and 2004

(Percent)

	China & HK		East Asia		NAFTA		EU		WORLD	
	1994	2004	1994	2004	1994	2004	1994	2004	1994	2004
Labor-intensive and resource-intensive manufactures	46.4	30.9	20.7	15.2	8.1	8.4	14.9	11.7	15.3	12.4
Leather, textiles, apparel, and footwear	34.2	21.5	14.5	10.2	2.6	2.6	7.1	5.1	8.6	6.5
Low skill-, technology-, capital- and scale-intensive manufactures	4.9	7.5	7.5	7.8	3.4	3.8	7.5	7.2	6.6	6.8
Fabricated metal products	2.4	3.1	2.1	2.2	1.7	1.9	2.6	2.5	2.2	2.2
Medium skill-, technology-, capital- and scale-intensive manufactures	11.0	15.6	24.5	23.9	30.0	29.9	29.7	30.8	25.8	26.0
Rubber and plastic products	2.3	2.2	1.8	1.7	1.4	1.7	2.1	2.0	1.7	1.7
Non-electrical machinery	2.4	4.7	8.9	8.3	11.4	11.2	12.7	12.4	10.5	10.0
Electrical machinery other than semiconductors	6.0	8.0	6.3	6.9	5.1	5.5	4.8	4.5	4.9	5.1
Road motor vehicles	0.3	0.7	7.5	7.0	12.2	11.5	10.1	11.8	8.7	9.2
High skill-, technology, capital- and scale-intensive manufactures	23.7	35.4	33.0	39.7	30.5	32.4	24.2	28.3	26.3	29.4
Chemical and pharmaceutical products	3.3	3.4	4.8	6.6	8.3	10.1	12.3	15.6	9.0	11.0
Computers and office equipment	3.9	12.1	8.4	10.0	6.1	5.5	3.5	3.4	4.9	5.0
Communications equipment and semiconductors	11.6	15.9	15.8	18.6	8.3	9.1	3.9	4.8	7.6	8.7
Scientific instruments, watches and photographic equipment	4.8	3.9	3.7	4.3	3.4	4.2	2.7	3.0	3.1	3.3
Remaining Exports	14.1	10.6	14.3	13.4	28.0	25.4	23.7	22.1	26.0	25.4

Source: Kohpaiboon, A., Thailand Automotive Industry: Multinational Enterprises and Global Integration (2006)

Table 21. Thailand's Export Products as Share of Total Exports in 1995 and 2005

(Percent)

	HS code	1995	2005
Labor-Intensive Exports:			
Leather, textiles, apparel and footwear	HS 41-43 and 50-65	17.1	7.5
More skill/technology intensive:			
Road motor vehicles	HS 87	1.2	7.4
Non-electrical machinery	HS 84	14.0	17.5
<i>Computer and office equipment</i>	<i>HS 8469-8473</i>	<i>9.7</i>	<i>10.4</i>
Electrical machinery (other than semiconductors)	HS 85 exc. 8541	16.5	18.3
<i>Communication equipment</i>	<i>HS 8517-8531</i>	<i>5.7</i>	<i>5.7</i>
<i>Semiconductors</i>	<i>HS 8541</i>	<i>0.7</i>	<i>0.7</i>
Scientific instruments, watches and photographic equipment	HS 90 and 91	2.2	2.0
Chemical and pharmaceutical products	HS 28,29 and 30	0.7	2.0

Source: MOC

The services sector is more protected than goods sector and there is evidence that its productivity growth is low and they cost more than some competitors. Some estimates show that financial sector maybe experiencing negative productivity growth. The recent investment climate survey showed that the IT sector is not doing very well either. Transport and logistics costs are also rising. Yet these are key inputs into manufacturing sector and thus affect their competitiveness. On the other hand countries like China and Vietnam are moving aggressively to reduce the cost of non-tradable services. For example the cost of a long distance phone call in China is one-third that of Thailand, the rate of internet use in China is 4.6 percent of population, significantly higher than Thailand and the cost of broadband is significantly lower in China than Thailand. Vietnam is currently still behind Thailand in these areas, but the improvements there has been huge (e.g. internet use has gone from zero in 1997 to 2.5 million in 2004), is likely to exceed Thailand unless more concerted efforts are made to improve IT services.

Skill Availability

This competition is harder to face, as engineers and skilled production workers in China, Vietnam and India cost only a

fraction of those in Thailand. In the past, Thailand worried mainly about competition from countries with similar or higher per-capita income levels and commensurate labor costs, but its no longer good enough for Thailand to be as good as countries of equal or higher income levels. Unless the *quality* of skilled production workers, engineers, IT professionals and managers in Thailand are *significantly better* than those in the lower-income countries, competing with them on technology-intensive goods is a major challenge.

Thailand must rise to that challenge by improving the quality of both secondary and tertiary education services. A good deal of this was discussed in the last Monitor, though the challenge to move towards a knowledge-economy and an innovation economy is of a different character than previously; the skill requirement is now also for knowledge-creation in addition to adoption and adaptation. Thailand must do very deliberately and systematically what South Korea did over the last two decades and Taiwan (China) and Singapore have been doing for many more decades, and it must do so with a sense of urgency. Improvements in secondary and tertiary education services take time to implement, and even longer for such improvements to enhance the labor force.

The last issue of the Thailand Economic Monitor discussed secondary and vocational education, but tertiary level education is an equally vital element of the innovation system of an economy. Building technological capability requires a university system on a certain scale able to generate a critical mass of skills. The volume and quality of skills, in particular, S&T skills are a necessary ingredient without which technological capability cannot advance. The industrialized countries have, of course, all passed this threshold as have Thailand's industrializing competitors in East Asia. A strong university system is a stepping stone to an innovation system, which is R&D conducted by the leading universities, in research institutes, and in corporate labs. This is not feasible without a high level of technical skills which is why raising the quality of at least a core of universities must precede efforts to build a research program. Corporations do the bulk of R&D but universities are responsible for basic and some of the applied research.

Some countries have invested hugely & successfully in tertiary education. Taiwan (China) invested heavily in higher education from the 1950s and into the 1980s, with an emphasis on S&T skills and on sending students abroad for higher education. The sector experienced a massive expansion from 1952 to 1989: the number of institutions rose from four universities and four junior colleges to 42 universities and 75 polytechnics or colleges with a total enrolment of 462,500. The increased supply of human capital and especially science and engineering skills significantly raised Taiwan's economic performance. Likewise, South Korea poured resources into tertiary education starting in the mid-1980s so that by the turn of the century, the higher education enrolment rate had surpassed that of the U.S. This surge can be attributed to the realization that underinvestment from the 1960s until mid-1980s had negatively affected quality of both education and research and resulted in a lack of highly trained scientists and engineers. Supporting this build up was the training of

Korean students overseas, a process initiated with the help of foreign aid which became available in the 1950s. The ratio of foreign-trained post-secondary students to all post-secondary students in Korea is twice as great as in Argentina, Brazil, and India, and higher than in Mexico

China and India, the two largest developing countries in the world, have been also attempting to enlarge their stock of human capital. From 1998 to 2005, the Chinese government dramatically expanded the higher education system. The annual incoming cohort of students jumped from one million in 1998 to five million in 2005, an average increase of 20 percent per year.³⁷ The gross enrolment rate for higher education has risen from 5 percent in 1998 to 21 percent in 2005. Emphasis is also being placed on the quality of teaching and research by increasing competition for faculty positions, through promotion policies, merit pay, and greater flexibility in personnel management. India has impressed the world by the quality of its elite universities. The Indian Institutes of Technology are among the finest in the world, on par with MIT and California Institute of Technology (Caltech). The National Law School, Bangalore is the best in India (many of its students have won Rhodes Scholarships to Oxford), and the All India Institute of Medical Sciences is consistently rated the top medical school in the country and one of the best in the world. The Indian School of Business, Hyderabad and the Institutes of Management (IIMs) are the top management institutes in India and also on par with the leading international schools.

Incentives

Appropriate incentives for workers, facilitators and firms are critical. Workers seek skill development if return is high and firms use more skilled labor if there are competitive pressures and government policies are supportive. The main actors and the

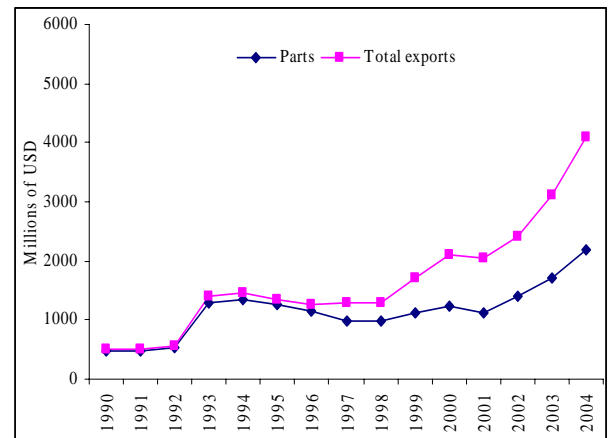
³⁷ 4.1 million students are expected to graduate in 2006 (MOE China 2006).

facilitators of skill development services must face the right incentives to contribute in an efficient way. Similarly, a firm makes decision on the skills of its work force (through recruitment and on-the-job or external training) and the technology it uses (through adoption, adaptation or creation) in an integrated way. The level of training offered by firms, depends more on the competitive pressures they face, and their incentives to adopt, adapt, and create new technologies, as well as on the level and quality of education of the labor force they can hire, than on subsidies for training. Firms more exposed to foreign competition (whether in export markets or domestic markets) recruit higher skills (and pay them better) and spend more in training, licensing, and R&D.

Thailand will therefore have to ensure that all firms, especially service sector ones, face increasing competition and facilitators deliver better educational services. A recent paper (Ariyaprichya et al, 2006)³⁸ shows that insufficient competition is allowing firms in Thailand to obtain rents and those same firms have lower productivity growth than others. This dulls pressure to innovate. Similarly, facilitators/educational institutions will not deliver quality education without right government policies.

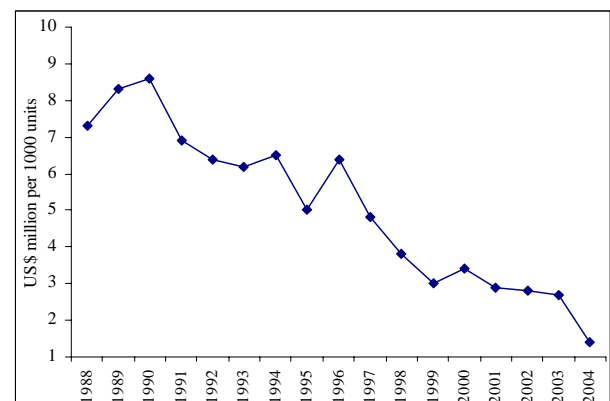
In addition, countries have developed specific sub-sectors where concerted efforts are made by government, firms and universities to innovate and grow. Thailand has made a good start in the automobile sector where through policies and regional integration have succeeded in reducing import content to very low levels (see Figure 41 and Figure 42). Nevertheless, design and very sophisticated parts are still done outside Thailand, but further value-addition is being attempted.

Figure 41. Export Value (US\$ million) of Thailand Automotive Industry, 1990-2004



Source: Kohpaiboon, A., Thailand Automotive Industry Multinational Enterprises and Global Integration (2006). Note: Lists of auto parts are compiled from carefully choosing from 6 digit HS items. The final lists cover 91 items from HS39, HS40, HS85 and HS87.

Figure 42. Ratio of (real) Import Value of Parts to Locally Assembled Cars (US\$ million /1000 units), 1988-2004



Source: Kohpaiboon, A., Thailand Automotive Industry Multinational Enterprises and Global Integration (2006).

³⁸ Ariyaprichya K., C. Karnchanasai, and C. O-lanthanasate, *Strengthening the Competitiveness of Thai Firms: What needs to be Done?*, a paper presented at the Bank of Thailand Symposium 2006.

Similarly, efforts are underway to upgrade Thailand's involvement in electronics specifically in embedded systems in three areas: automobiles, agitronics (mainly agriculture) and in RFID. Japanese firms have been working closely with Thai government and Thai firms as well as national universities. Again it appears that availability of good engineers is turning out to be the major constraint. Efforts are also underway in textile and jewelry to upgrade Thailand into a fashion hub.

The Tenth Economic and Social Development Plan (2007-2011) emphasizes the objective of moving Thailand towards a knowledge-based and innovation driven economy. The challenge is to get the attention of top leaders, intellectuals and business leaders in the urgency of this challenge to address some of the issues identified above. The time is now and the above should be added to the medium term agenda that was set out in the last Monitor.

IMPLEMENTATION OF STRUCTURAL REFORMS

The Tenth National Economic and Social Development Plan (2007-2011) was acknowledged by the Cabinet. Under the theme of “Green and Happiness Society”, the Plan covers 5 strategies: (1) developing human resource and a knowledge economy, (2) strengthening communities and society, (3) economic restructuring, (4) maintaining biodiversity, environment, and natural resources, and (5) promoting good governance. Moreover, the policy platform for the upcoming year as presented by the Prime Minister to the Legislative Assembly on November 3, 2006 are broadly consistent with these strategies.

Reforms have been slow this year as the result of political uncertainties and the change in government. Many laws and master plans, especially those that would improve the efficiency of the financial and

corporate sectors, have not been approved. Free-trade agreement negotiations have been put on hold. However, there has been progress in other areas, particularly in public sector services. For example, the Customs Department has started implementing paperless customs procedures for both imports and exports. The Government Financial management Information System (GFMS) has been developed to link up to the revenue collection agencies, so that both government expenditures and revenues can now be monitored real time.

This issue of the Economic Monitor continues from its previous issues to examine the progress in the implementation of the financial and corporate sector reforms and restructuring, trade reform, and public sector governance reform over the past year.

3.1 Financial and Corporate Sector Reforms and Restructuring

Financial Sector Reforms and Restructuring

A few Master Plans aimed at improving the efficiency of the financial sector has been drafted and are at different stages of approval this year. These include the Capital Market Master Plan II, the Master Plan for the Development of Money and Foreign Exchange Markets, and the Master Plan for Grassroot Financial Services. The *Capital Market Master Plan II* was approved by the cabinet in July. It aims to improve the attractiveness of the capital market as an alternative source of fund-raising for firms and saving choice for individuals. The preliminary draft of the *Master Plan for the*

Development of Money and Foreign Exchange Markets has been finalized and submitted to the Governor of the BOT since the middle of this year. The BOT has taken the lead in formulating, on a consultative basis, this three-year plan, which will compliment the Financial Sector Master Plan. Its objectives are to improve the efficiency of financial intermediaries, broaden the range of financial instruments, and streamline regulations related to the money and foreign exchange markets in Thailand. The draft *Master Plan for Grassroot Financial Services* is awaiting endorsement from its drafting sub-committee. The Master Plan has been revised in the last few months

and, after endorsement, will be sent to the Minister of Finance and then to the Cabinet for approval. The Master Plan focuses on legalizing the “informal groups” (microfinance institutions that are informal, which are mainly savings groups on rural areas) by providing a framework for promoting them to become more sufficient and more sustainable.

The Credit Information Business Act was amended and effective since February, but the approval of the draft Deposit Insurance Act has made no progress. The amended *Credit Information Business Act* was effective since February 14th this year. The amendments reduce the onerous legal risk for the Credit Bureau and their members and provide more flexibility for the operations of the Credit Bureau. The draft *Deposit Insurance Institution Act* was endorsed by the Cabinet since November 2004. Its review by the Council of State was planned to have been finished by January 2006, but has been delayed due to political uncertainty. Upon the enactment of the Act, a Deposit Insurance Agency will be set up with an initial capital base of Bt 1 billion and will offer a limited guarantee on deposits at insured financial institutions. This will replace the current blanket guarantee of the BOT’s Financial Institutions Development Fund (FIDF).

The plan to transform the Insurance Department into an independent regulator has been revived. The Finance Minister has requested the Commerce Ministry to prepare a legislation that would form a new regulatory body, with a role similar to that of the Securities and Exchange Commission (SEC) in the capital market. The Office of the Insurance

Commission could be set up within one year once the legislation receives approval from the National Legislative Assembly. The idea of an independent regulator was first floated seven years ago under a plan to liberalize the country’s insurance industry, in line with global trends. The new body would be supervised by an 11-member board (including the central bank governor, senior civil servants, the secretary-general of the SEC, and representatives from insurance operators), and would provide support to cope with future expansion in the insurance sector, driven in part by an increase in firms offering of financial products with added investment features.

Corporate Sector Reforms and Restructuring

No further progress on legal reforms regarding corporate sector has been made this year. The draft Secured Transaction Act, approved by the Cabinet in 2003, is still waiting for a revision by the Joint Senate-House of Representatives committees. This Act would allow for more flexible collateralization of liquid assets other than the traditional real estate properties. However, it is not likely that the draft will be approved in the near future given the current political uncertainty (see Box 5 on Thailand’s Long-Delayed Secured Transactions Act). Similarly, the draft amendments to the Asset Management Corporate Act (AMC Act) to allow the Government AMC to purchase distressed assets from the private financial institutions have not been reviewed by the Parliament even if the amendments would accelerate the resolution of distressed assets in private banks and lessen their bad debt portfolios and thus reducing level of NPLs in the financial system.

Box 5. Thailand's Long-Delayed Secured Transactions Act

Thailand's Secured Transactions Act has been awaiting approval from the Cabinet since 2003. This Act, when enacted, would allow for more flexible collateralization of liquid assets other than the traditional real estate properties. It will enhance firms', particularly SMEs' and those in the services sector, access to formal finance by use of non-traditional collateral (because these firms generally do not have large property holdings).

Firms' access to finance critically depends on the availability of pledgeable assets as collateral. However, today, there is a striking difference between what firms have on their balance sheet and what the banks accept as collateral. The latter depends on what the legal system recognizes as pledgeable. For example, the lender in many countries, including Thailand, accepts as collateral only land, building and certain registered movable assets such as automobiles and securities, while well more than half of firms' balance sheet is typically occupied by assets other than those, e.g., equipment/machinery, inventory, livestock, leaseholds, receivables/future cash flows or intellectual properties, etc. This has been a factor restricting the firms' access to formal finance particularly in the developing world, Thailand included. In the recent years, some emerging market economies, particularly those in Central & Eastern Europe, have adopted practices developed in developed countries in order to address the issue.

Three key elements of an enabling legal framework for secured lending are (1) no legal limits on the type of assets that are pledgeable, (2) an efficient centralized or networked collateral registry which is easily and widely accessible and enables verification the seniority of claims, and (3) an efficient judiciary system for collateral enforcement. While (1) broadens the range of assets that may be pledged by the borrower, (2) and (3) enhances their acceptability as collateral for the lender. The law should also address any potential conflicts with other laws including high level laws such as Civil Code.

In Asia, Thailand is among the first to prepare a Secured Transactions Act and has key elements above. Firstly, the Act defines basic elements of debtor-creditor relationships based on the use of collateral such as parties to collateral agreement and their rights and duties and establishes a clear institutional framework to legalize it. It broadens the scope of legally pledgeable assets with a catch-all clause to provide open-ended possibilities. Rights to assets to be acquired in the future are also included among the pledgeable assets. Secondly, the Act provides for the registration of collateral which ensures the clarity in the seniority of claims by multiple security holders over the same asset registered as collateral. Thirdly, it makes cross reference to Bankruptcy Law to ensure their consistency and clarify their relationships. Finally, it provides for its efficient enforcement by way of swift foreclosure (in 15 days) while protecting the security holder over perishable assets.

The Act, when enacted, will greatly increase the access of firms in the services sector and small and medium-sized enterprises (SMEs) to financing. With the services sector being a large sector in Thailand (roughly 45 percent of GDP), enhancing their access to finance will help boost the sector as a significant potential source of growth for Thailand in the near future. Similarly, SMEs' higher ability to access finance will enable them to expand and thrive, which has been what the Government has been trying to promote. Unfortunately, the Act has been now awaiting approval from the Cabinet for three years, and there is currently no definite timeline for it to be approved.

On the other hand, Thailand continues to make progress in improving its corporate governance framework and practices. In March 2006, the Stock Exchange of Thailand (SET) released the new and updated version of the Principles of Good Corporate Governance. More principles have been added to reflect revisions to the OECD Principles of Corporate Governance and recommendations arising from the corporate governance ROSC report issued in September 2005. Other steps taken to implement recommendations arising from the

corporate governance ROSC report issued in September 2005 are listed in Table 22. Moreover, from early 2005 through the first half of 2006, the Securities Exchange Commission has issued 5 new accounting guidelines. The latest accounting guideline is on deducting retained losses to prevent listed companies from recording artificial retained profit (loss) to pay out dividends. Currently, a total of 11 new accounting guidelines are being implemented.

Table 22. Status of Implementation of the Corporate Governance ROSC

OECD Principle	CG ROSC Recommendation	Progress
Ensuring the basis for an effective corporate governance framework	Strengthen enforcement, including introduction of civil penalties & administrative sanctions as more efficient alternative to impose on violators.	A study on the implementation of civil sanctions has been completed and submitted to the Ministry of Justice for further consideration. Drafting of regulation is likely to begin in late 2006.
The rights of shareholders and key ownership functions	Propose amendments to the SEA and the PCA constituting important efforts to increase the protection of minority shareholders in order to clarify and strengthen shareholders' rights and give them more voice in the conduct of AGMs.	The SEC has announced 2006 as the year of Annual General Meeting. SET has issued a Best Practices Guidelines to ensure that minority shareholders have the right to propose AGM agenda items in advance of the meeting as a guideline for the conduct of AGM by listed companies. In addition, in 2006, the SEC in cooperation with the Thai Investors Association and the Listed Companies Association has completed a project to raise corporate governance awareness in the area of shareholders' participation and protection.
Equitable treatment of shareholders	To facilitate the exercise of cross-border voting, remove legal impediments to the electronic appointment of proxies, in line with international good practice.	The SEC is involved in initial discussions with the Ministry of Commerce (MOC) aimed at relaxing the legal requirements for facilitation of an electronic proxy as well as the issue of proxy's identity verification.
Role of stakeholders in corporate governance	The SET should require all listed companies to have Codes of Conduct, and to disclose their compliance with their Codes in their annual reports. Companies should be encouraged to add protections for whistleblowers in their codes of conduct, and to establish a hotline for receiving tips on fraudulent behavior.	The Listed Companies Association has disseminated, in its website, examples of codes of conducts from selected listed companies. The SET, in March 2006, issued 12 codes of conduct guidelines for listed companies. The guideline has been adapted to fit the local business environment, especially listed companies that do not have codes of conduct in place.
Disclosure and transparency	<p>Require management (CEOs, CFOs) of listed companies to include in the annual reports a statement on their responsibility for establishing and maintaining adequate internal controls over financial reporting and compliance with applicable laws and regulations, as well as an assessment of effectiveness of their internal controls consistent with international best practices.</p> <p>The SEC should consider asking entities that act as professional custodians to seek their customers' agreement that they may comply with applicable regulatory disclosure requirements, including, for example, disclosing to the SEC the identity of the ultimate beneficial owners, without breaching their confidentiality agreement with their customer.</p>	<p>The SEC is in the process of amending the approval criteria for the issuers. The new requirement will require the issuers to establish good internal control systems by either setting up an internal audit department or outsourcing the responsibility to an outside expert.</p> <p>The SEC is in the process of revising disclosure criteria, which requires listed companies to disclose ultimate beneficial owners of the substantial shareholders. By amending the definition of the substantial shareholders from 10% to 5% of total paid up shares, the step is considered as transparent and crucial. In addition, the SEC also conducts reviews of disclosure reports of listed companies, including the disclosure of shareholder's names and his/her shareholdings.</p>
Responsibilities of the board	Improve independence of outside directors and effectiveness of audit committees of boards of directors needs to be improved, including clarifying and strengthening the role and function of audit committees, overseeing insider conflict of interests, and overseeing business advisory / consulting services consistent with international best practice.	The SEC and the Stock Exchange of Thailand (SET) have commenced a review of relevant rules and regulations concerning the qualifications of independent directors, audit committees as well as the roles and functions of audit committees. The new regulations are scheduled to be released in early 2007 and will take effect in 2008. This will allow a sufficient lead time for the preparation and adjustment among listed companies.

3.2 Recent Trade Reforms

Tariff Reform

The government has promoted a utilization of the alternative energy by exempting import tariff rates on NGV combustion engines. In June 2006, import tariffs of new NGV engines were reduced from 10 percent to 0 percent while the import tariffs of old NGV engines were exempted temporarily for 2 years. These NGV engines can not be produced in Thailand, therefore, the tariff exemptions are expected to increase the conversion of oil combustion engines to the NGV combustion engines and thus helping to reduce the oil consumption and transportation cost.

According to the ASEAN Industrial Cooperation Scheme (AICO), the tariff rates for AICO products which applied after 1 January 2005, were exempted. The AICO scheme is the latest industrial cooperation program signed in 1996 to replace the existing industrial cooperation programs which are out-dated³⁹. The objective of this scheme is to improve competitiveness of ASEAN companies, to support outsourcing and industrial complementation, and to stimulate investment among ASEAN member countries. The privileges from the AICO are the lower tariff rates and the local content accreditation. Under the AICO Arrangement, tariffs on AICO products that participated after January 2005 were exempted while tariffs of products participated before 30 July 2004 and during 30 July 2004 to 31 December 2004 were reduced to 5 and 3 percent, respectively. This tariff reduction was made retroactive to 30 July 2004. As of October 2006, 14 companies, mostly in automotive sector, have benefited from this scheme.

³⁹ These include the ASEAN Industrial Joint Venture (AIJV) and the Brand-to-Brand Complementation (BBC) Scheme. To participate in AICO scheme, a minimum of two companies in two different ASEAN countries are required to apply for an AICO arrangement. Once the AICO arrangement is approved, the Certificate of Eligibility (CE) will be issued by the ASEAN Secretariat to participating companies.

Export Promotion and Assistance

The progress of bilateral FTA negotiations have stabled due to the political uncertainty. There has been no significant progress on the FTA negotiations in the past six months given the current political situation as Thai negotiators await for the guidelines for negotiation from the new government. However, those FTAs which were signed and implemented before the political changes have continued as planned. These include ASEAN-China, Thailand-Australia, Thailand-New Zealand, and Thailand-India (see Box 6).

The Ministry of Finance has introduced a paperless-customs procedure to enhance the customs procedure to the international standard. The customs department implemented the paperless customs for exporting on 1 September 2006 and for importing on 1 October 2006. This new procedure is expected to facilitate the international trade by shortening the customs procedure and thus improving country's competitiveness. Currently, the new procedure is implemented in parallel with the paper-based procedure. However, the customs will abolish the paper-based custom procedure once the paperless customs are accounted for more than 80 percent of imports and exports or the paperless customs are implemented throughout the country for at least 6 months.⁴⁰

The EXIM Bank has expanded its loan services to support small and medium enterprises (SME) exporters. In June 2006, the EXIM launched a new export credit for SMEs exporters, called Small Exporters Financing Facilities (SEFF). The main objective of this credit is to provide sufficient working capital for small exporters both before and after exports. However, these credits are restricted to non-NPLs exporter with sales revenues of less than Bt100 million.

⁴⁰ The paper-based procedure is called Electronic Data Interchange (EDI) using both electronic and hard data to proceed the custom procedure.

Box 6. Progress on Thailand's Free Trade Agreements (FTAs)

Given the political uncertainty, Thailand's FTA negotiations with 9 countries and 2 economic integrations have stalled. However, the FTAs, agreed before the parliament dissolution in February 2006, continued as planned. The progress of each FTA can be summarized as follows:

- **ASEAN and China:** The tariff reduction schedule under ASEAN and China FTA has been completely effective last year. During January to September of this year, Thailand exports to China increased by 26 percent while imports from China increased by 20 percent in the same period. Currently, the two parties are preparing for the negotiation on trade in services as well as investment.
- **Thailand and India:** The tariff rates of 82 items under the Early Harvest Program, which has been reduced since 1 September 2004, became zero rates on 1 September 2006. In the first nine months of this year, exports of these items increased by 9.5 percent and accounting for 20.5 percent of total exports to India. Imports of these items also increased by 32.3 percent and accounting for 6.6 percent of total imports from India. The two are still negotiating on trade in goods as well as trade in services and investment.
- **Thailand and Australia:** After the first meeting of Thailand-Australia FTA Joint Commission to review the progress of the FTA implementation in December 2005, there has not been any meeting between the two. However, Thailand and Australia has planned to arrange a meeting at the ministerial level to discuss about an opportunity to expand trade and investment. The trade flows between the two have continued to expand significantly with the 33 % export growth to Australia and the 0.8% of imports growth from Australia in the first eight months of this year.
- **Thailand and New Zealand:** The first meeting of Thailand-New Zealand Closer Economic Partnership (CEP) Joint Commission was held in May 2006 to review a progress of the implementation of Thailand and New-Zealand CEP Agreement, effective in July 2005. Given, New Zealand's specialties on production of live stock and dairy products, Thailand had proposed six joint projects on live stock and dairy products and New Zealand agreed to consider these projects.
- **Thailand and Bahrain:** The latest meeting between the two countries was in April 2006; however, there was no significant progress. As a result, at end of October 2006, the tariff reductions under the early harvest program signed in 2002 have not been effective yet.
- **Thailand and Peru:** According to the protocol on the acceleration of liberalization on trade in goods and trade facilitations signed in November 2005, Thailand and Peru agreed to reduce the tariff rates of items in the Early Harvest Scheme once the technical issues, in particular, the rules of origin are mutually agreed. In the latest meeting in June 2006, the two reached an agreement on this matter; however, the tariff reductions under the EHS have not been effective until the official agreement on the rules of origin has been signed by the two governments.
- **BIMSTEC⁴¹:** The recent meeting, in July 2006, between the BIMSTEC members continued to show a good progress. The members discussed fruitfully on the draft of trade in goods, items to be included in the tariff reduction schedule, and rules of origins. However, the draft of the agreement on trade in services and investment prepared by India was not discussed in this meeting. The next meeting is expected to be held in October 2006.

The other FTA negotiations are under progress. However, the negotiations between Thailand and US and Thailand and EFTA have been on hold since the government dissolution early this year until the new government has been appointed⁴².

- **Thailand and Japan:** The two parties have reached an agreement on Japan-Thailand Economic Partnership since early this year. However, the signing ceremony of the Japan-Thailand Economic Partnership (JTEP) has been postponed due to the political changes in Thailand.

- **ASEAN and Korea:** The agreement on trade in goods was signed in August 2006. However, Thailand has not signed this agreement due to the irreconciled negotiation on the products including in the sensitive list. According to this agreement, the ASEAN-6 shall start to remove its tariff rates at least 50 percent of total tariff lines to 0-5% no later than 1 January 2007 while Korea shall start to eliminate its tariff rates at least 70 percent of total tariff lines on the effective date.

⁴¹ BIMSTEC includes seven countries, namely, Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand.

⁴² The latest meetings of both negotiations were held in January. Please see details in Thailand Economic Monitor April 2006 issue.

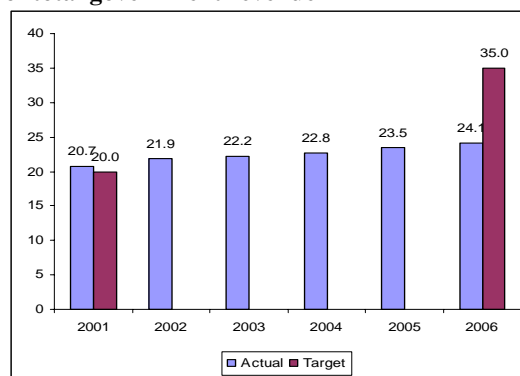
3.3 Public Sector Reform

The GFMIS is now able to link daily revenues collected by the tax collection agencies. The Government Financial Management Information System (GFMIS) was implemented in the beginning of 2005. In the first phase, it was used to manage the Government's expenditure on a monthly basis. Only recently, the GFMIS has been developed to also link on a daily basis the revenues data from the Revenue Department, Excise Department and Customs Department. This would enable the Government to monitor its revenues and expenses on-line and on a real time basis. In addition, at the request of the Public Management Office, the Cabinet has approved a Bt15.7 billion develop the GFMIS-TR system which is a debt management system linked to the GFMIS. The GFMIS management will be moved from the GFMIS Management Office to the Ministry of Finance as the Cabinet has issued a resolution on November 7th, 2006 for the GFMIS Management Office to be dissolved.

The Cabinet has approved in principle the amendments to the Decentralization Act as proposed by the Ministry of Finance to postpone the deadline in meeting the fiscal decentralization target. According to the Decentralization Act (1999), local government revenues should be 35 percent of the total central government revenues by 2006. However, the share of local government revenue has been slowly rising since 2001 and is 24 percent of total central government revenues this year (see Figure 43). Since 2003, 180 out of the planned 245 activities and 0.4 percent (4,449 personnel) of total civil servants have been transferred to the local governments. However, the activities, which costs the most, namely, education and health services have not been transferred. To hasten the decentralization process, the Cabinet has resolved that the Ministry of Education transfer at least 3 schools to each province, 2 schools to each district and municipality, and 1 school to each sub-district administration within 2006. Nevertheless, 35 percent target is not achievable. On November 7th, 2006, the Cabinet has therefore approved in principle the

amendments to the 1999 Decentralization Act which delays fiscal decentralization to meet the 35 percent target to an unspecified date in the future. The draft Act is now being vetted by the State Council.

Figure 43. Local government revenue as percent of total government revenue



Source: Office of the Decentralization to local government organization

Appendix 1: Key Economic Indicators

	2004	2005 p /	2005	2006			2006		
	Year	Year	Q4 p/	Q1 p/	Q2 p/	Q3 p/	Jul p/	Aug p/	Sep p/
Output, Employment and Prices									
GDP (% change, previous year)	6.2	4.5	4.7	6.1	4.9	..	..	..	..
Manufacturing production index (2000=100)	142.6	155.5	160.2	167.0	163.0	166.6	162.3	166.5	171.2
(% change, previous year)	11.7	9.1	7.2	9.7	6.6	6.3	6.2	7.8	5.0
Unemployment rate (%)	2.1	1.8	1.5	1.9	1.7	1.2	1.1	1.4	1.2
Real wage growth (%) 1/	-0.4	2.3	0.0	0.5	7.1	..	..	..	..
Consumer price index (% change, previous year)	2.8	4.5	6.0	5.7	6.0	3.6	4.4	3.8	2.7
Public Sector									
Government cash balance (Billion Baht)	8.3	-45.8	-109.0	-28.8	97.9	44.5	-16.5	-8.8	69.8
Government cash balance (% GDP)	0.1	-0.6	-5.7	-1.5	5.2	..	..	..	..
Public sector debt (% GDP, end of period) 2/	47.5	46.4	46.4	41.2	41.7	..	41.6	41.3	..
Foreign Trade, BOP and External Debt									
Trade balance (US\$ million)	1,460.0	-8,529.6	-763.3	-224.5	-1,704.6	1,450.4	-222.9	271.2	1,402.0
Exports of goods (fob, US\$ million)	94,941.0	109,192.8	28,391.1	29,091.5	30,592.0	34,555.3	11,042.8	11,728.0	11,784.6
(% change, previous year)	21.6	15.0	10.9	17.7	16.0	16.3	17.7	17.0	14.5
Imports of goods (cif, US\$ million)	93,481.0	-117,722.4	-29,154.4	-29,315.9	-32,296.6	-33,105.0	-11,265.6	-11,456.8	-10,382.6
(% change, previous year)	25.7	25.9	19.6	5.5	3.3	12.2	16.3	11.2	9.1
Current account balance (US\$ million)	6,865	-3,665.6	896.9	1,656.1	-1,153.3	2,295.9	308.5	812.6	1,174.7
(% GDP)	4.2	-2.0	1.93	3.37	-2.32	..	..	..	..
Foreign direct investment, net (US\$ million)	814	3,097.6	1,008.7	3,131.0	911.3	..	381.9	124.0	..
Total external debt (US\$ million)	51,312.0	52,040.0	52,040.0	57,719.0	57,826.0	..	..	..	..
(% GDP)	35.7	32.4	32.4	34.9	33.9	..	..	..	..

	2004	2005 p /	2005	2006			2006		
	Year	Year	Q4 p/	Q1 p/	Q2 p/	Q3 p/	Jul p/	Aug p/	Sep p/
Short-term debt (US\$ million)	12,174.0	16,014.0	16,014.0	19,130.0	17,838.0	..	..	..	..
Debt service ratio (% exports of goods and services)	8.5	10.8	12.8	9.1	6.8	..	..	..	..
Reserves, including gold (US\$ million)	49,831.7	52,065.9	52,065.9	55,265.8	58,057.4	61,592.7	58,796.3	59,355.7	61,592.7
(months of imports of goods)	6.4	5.3	5.4	5.7	5.4	5.6	5.2	5.2	5.9
Financial Markets									
Domestic credit (% change, previous year) 3/	7.4	7.7	7.7	..	..	..	..	..	..
Short-term interest rate (average period) 4/	1.0	1.6	2.5	3.4	4.0	4.1	4.0	4.1	4.1
Exchange rate (average period)	40.2	40.2	41.0	39.3	38.1	37.6	38.0	37.6	37.4
Real effective exchange rate (1994=100)	77.7	79.0	80.1	82.6	85.2	85.9	85.4	85.8	86.4
(% change, previous year)	-0.3	1.6	5.0	4.5	8.7	9.4	9.7	9.4	9.1
Stock market index (Dec 1996=100)	668.1	713.7	713.7	733.3	678.1	686.1	691.5	690.9	686.1
Memo: GDP (US\$ billion)	161.7	176.6	46.5	49.1	49.6	..	..	..	..

p = preliminary

1/ Computed from average wage of employed person from Labor Force Survey

2/ Include direct government debt, non-financial-state-enterprise debt and financial institutions development fund (FIDF) debt

3/ Yearly and quarterly data include credits extended by all financial institutions

4/ Average interest rates on time deposits of less than 6 months (percent per annum)

Appendix 2. Monitoring Matrices for Structural Reform Implementation⁴³

1. Poverty Reduction Diagnostics
2. Financial and Corporate Sector Reform
3. Reforms to Improve Business, Investment Environment and Trade
4. Public Sector and Governance Reforms
5. Social Protection

⁴³ This appendix specifies in some detail, the reform measures taken during the last 6-12 months and their significance as well as measures to be taken in the next 6-12 months, the latter identifying key process steps that might have been taken as a prelude to those measures taken.

1. Poverty Reduction Diagnostics*

	Objective	Reform Measures Taken
A.	<p>Improve quality of life for the poor both in the urban and rural areas by enhancing self-reliance and creating opportunities to improve the local economy</p>	<p><i>Measures taken over last 6 months and their significance</i></p> <ul style="list-style-type: none"> Problems of a third of those who have registered under the Poor People Registration Program and have requested for assistance have been resolved, and measures have been identified to strengthen the effectiveness of the Government's poverty alleviation programs. From February 2004 to April 2006, 12.8 million people self-registered with the Government's Poor People Registration Program in which only half (6.2 million people) asked for assistance from the government. After the implementation of the second phase of poverty eradication caravan to help resolve problems of those people who had asked the government for help, problems of 2.04 million people had been resolved, while the remaining problems of 2.2 million people are in the process of being resolved and the remaining 1.9 million people have not received help. To strengthen its effectiveness in poverty reduction, the Government had identified improvement measures in two areas. One area is to improve the coverage of Government programs to help poor people. To do so, poverty data from various sources – Poor people registration from Department of Provincial Administration, Basic Minimum Need and Village Status Database from Community Development Department, and poverty headcount ratio from National Statistical Office – should be complementarily used for identifying poverty areas and poor households. The second area identified for improvement is targeting of poverty eradication programs, which is currently weak, and entails redundant work between different government agencies. The work plan to help poor people should be more target-oriented by focusing on helping people in the poor registration lists and the poor areas and households from the survey data. All relevant government agencies are asked to coordinate to reduce their redundant work and improve the efficiency in serving the need of the poor.

*Prepared by Cheanchom Thongjen

2. Financial and Corporate Sector Reform*

	Objective	Reform Measures Taken
A.	Enable sharing of credit information among financial institutions	<p><i>Measures to be taken in the next 6-12 months</i></p> <ul style="list-style-type: none"> • The Credit Information Protection Committee (CIPC) will implement operational changes based on the amended Credit Information Business Act that has been effective since February. The main change is that credit reports can now be used for credit reviews and a more practical format of debtor's consent will be adopted. The next proposal will be to allow the National Credit Bureau (NCB) to provide credit scoring, use credit data for the Basel II development, and extend their use to trade financing.
B.	Formulate and implement a medium-term strategy for Thai financial sector	<p><i>Measures to be taken in the next 6-12 months</i></p> <ul style="list-style-type: none"> • The BoT is monitoring and assessing the result of the first phase of the Financial Sector Master Plan (FSMP), particularly in terms of efficiency and competitiveness. All the assessment will be an input for preparing the next phase, which is intended to lead to further liberalization of the Thai financial sector. • The draft Master Plan for Grass-Root Financial Services is awaiting endorsement from its drafting sub-committee. The Master Plan has been revised in the last few months and, after endorsement, will be sent to the Minister of Finance (this action is expected to happen next month), and then to the Cabinet for approval. The Master Plan focuses on legalizing the "informal groups" (microfinance institutions that are informal, mainly savings groups on rural areas) by providing a framework for promoting them to become more sufficient and more sustainable.
C.	Transition from the current blanket government guarantee on deposits to a limited deposit insurance scheme	<p><i>Measure to be taken, but has been delayed</i></p> <ul style="list-style-type: none"> • The draft Deposit Insurance Institution Act will be reviewed by the Office of the Council of State, but a deadline has not been confirmed. The draft Act was endorsed by the Cabinet in November 2004, and its review by the Council of State was planned to have been finished by January 2006, but has been delayed due to political uncertainty. Once the legal review has been completed, the draft Act will be submitted to the Parliament for its consideration. Upon the enactment of the Act, a Deposit Insurance Agency will be set up with an initial capital base of Bt 1 billion and will offer a limited guarantee on deposits at insured financial institutions. This will replace the current blanket guarantee of the BOT's Financial Institutions Development Fund (FIDF).
D.	Remove legal impediments and provide an enabling environment for derivative products	<p><i>Measures taken over last 6 months and their significance</i></p> <ul style="list-style-type: none"> • The Thailand Futures' Exchange (TFEX) started its operation on April 28th, 2006. The TFEX has been granted a license from the Securities and Exchange Commission (SEC) since February 2005 to operate a futures' exchange. The only product being traded for the time being are SET50 futures. Currently, TFEX has 23 members.

	Objective	Reform Measures Taken
		<p><i>Measures to be taken in the next 6-12 months</i></p> <ul style="list-style-type: none"> • The Thailand Futures' Exchange (TFEX) plans to launch further products. The next product to be traded might be an interest rate product. The establishment of an organized derivatives' exchange would add more players and liquidity to the financial market and provide investors with tools to manage their risk.
E	Develop the domestic financial markets, including bond, capital, and money markets.	<p><i>Measures taken over last 6 months and their significance</i></p> <ul style="list-style-type: none"> • The Cabinet approved the Capital Market Master Plan II in July. The Capital Market Master Plan II aims to improve the attractiveness of the capital market as an alternative source of fund-raising for firms and saving choice for individuals. The quantitative targets of the Plan are to (i) increase the size of equity and debt markets to be comparable to that of the banking sector and (ii) encourage more institutional investor's participation in equity market and more individual investors in debt market. • Thailand Securities Depository Company (TSD) has assumed the responsibility for clearing and settling trading of government securities, formerly performed by the BOT, since May 15th. The TSD has developed an efficient and effective electronic system linked to the Bank of Thailand's (BOT) and its members' system, allowing the TSD to become a more comprehensive central depository and clearing house. With this new system in place, the BOT would still retain its roles as the registrar of government bonds and developer of financial policy, but now it will be able to utilize information uploaded directly from the TSD's system. This will help strengthen the overall efficiency of the bond market, reduce operational costs and work redundancies between the public and private sectors as well as add more liquidity to the bond market. • The Thai Bond Market Association (BMA) has developed and adopted pricing models and market/model conventions to price new complex derivatives products and illiquid bonds. Appropriate valuation of bonds and their derivatives is critical to the further development of the Thai bond market. Limited market liquidity and less than well-functioning market-making mechanisms make the task of Thai BMA in providing fair value of bonds and their derivatives challenging. <p><i>Measures to be taken in the next 6-12 months</i></p> <ul style="list-style-type: none"> • The BOT aims to complete its final draft of the Master Plan for the Development of Money and Foreign Exchange Markets in Thailand. A preliminary draft has been finalized and submitted to the Governor of the BOT since the middle of this year. The BOT has taken the lead in formulating, on a consultative basis, this three-year plan, which will compliment the Financial Sector Master Plan. Its objectives are to improve the efficiency of financial intermediaries, broaden the range of financial instruments, and streamline regulations related to the money and foreign exchange markets in Thailand. However, the changes in governing body of the BOT may further delay the approval process.

	Objective	Reform Measures Taken
		<ul style="list-style-type: none"> • The SET will submit a three-year plan to the Finance Minister. The main objectives of this plan are approving cross-border listings, increasing share free-floats in state-owned enterprises, and allowing bank branches to offer securities services. The three-year plan will be submitted to the Finance Minister for approval in the next few months. • The plan to transform the Insurance Department into an independent regulator has been revived. The Finance Minister has requested the Ministry of Commerce to prepare a legislation that would form a new regulatory body, with a role similar to that of the Securities and Exchange Commission (SEC) in the capital market. The Office of the Insurance Commission could be set up within one year once the legislation receives approval from the National Legislative Assembly. The idea of an independent regulator was first floated seven years ago under a plan to liberalize the country's insurance industry, in line with global trends. The new body would be supervised by an 11-member board (including the central bank governor, senior civil servants, the secretary-general of the SEC and representatives from insurance operators), and would provide support to cope with future expansion in the insurance sector, driven in part by an increase in firms offering of financial products with added investment features.
F.	Rationalize state holding of specialized financial institutions, state owned enterprises, and state commercial banks	<p><i>Measures to be taken in the next 6-12 months, but delayed</i></p> <ul style="list-style-type: none"> • The FPO will revise the core principles of the PSA after the SME bank has taken an initial step for the implementation of a Public Service Account (PSA). The SME bank has proceeded with an initial implementation of the PSA by separating social and commercial activities on its income statement since early 2005. This measure should have been followed by making the same separation on its balance sheet, but it is still to be confirmed by the FPO if this second step has been taken. A public service account reports costs and performance of social mandate activities separately from commercial activities. This is an initial step to improve the transparency of financial reports by specialized financial institutions (SFIs). By properly costing and budgeting socially mandated activities, the MOF can hold SFIs accountable for costs and benefits. The FPO is currently revising the core principles of the PSA, but no definite timeframe has been fixed.

* Prepared by Pablo Gallego

3. Reforms to Improve Business, Investment Environment and Trade *

	Objective	Reform Measures Taken
A.	Improve competitiveness of business sector	<p><i>Measure taken in the last 6 months and their significance</i></p> <ul style="list-style-type: none"> • The National Telecommunication Commission (NTC) released its implementation plan for 2006. In the NTC's 2006 implementation plan, the NTC intended to implement the proactive strategies to promptly respond to the liberalization of telecommunication and changes in the telecommunication industry. The main objectives of the plan are to encourage fair competition, to efficiently allocate telecommunication resources, to protect consumers and social services, to link global and social networks, and to provide services to the consumer at the international standard. • The NTC approved 1.5 million mobile phone numbers to each mobile phone operator. This year, the NTC has given 1.5 million mobile phone numbers to Total Access Communication Public Company (DTAC) and True Corporation. Another approval of 1.5 million mobile phone numbers for Advanced Info Service (AIS) is under progress. The additional mobile phone numbers would allow the service providers to expand their mobile phone services to respond the current high demand.
B.	Reform of legal and judicial regime	<p><i>Measure taken in the last 6 month and their significance</i></p> <ul style="list-style-type: none"> • 28 projects have been proposed by the sub-committees of the National Legal Framework and Policy Committee to be implemented in 2006. These projects include, for example, drafts amendment to land law, studies on improving laws and regulations such as local credit law and anti-dumping law, and development on law manuals and curriculum. In addition, public knowledge dissemination on legal reforms is being done through seminars on legal reforms, a book on legal reform, and bimonthly newsletter.
C	Improve the skills and quality of labor	<p><i>Measures taken over last 6 months and their significance</i></p> <ul style="list-style-type: none"> • During fiscal year 2004-2006, the Vocational Education Commission (VEC) organized 28 projects to improve the competency standard of labor. The projects covered 11 strategic industrial sectors, namely agriculture and food (2 projects), tourism (1 project), fashion and apparel (9 projects), Iron and Steel (2 projects), wooden furniture (1 project), retail sale (1 project), jewelry (4 projects), hotel (1 project), ceramic and glass (2 projects), rubber products (2 projects), and vehicle and parts (3 projects). The projects aimed to improve worker's competency standards and thus improving country's competitiveness. <p><i>Measure to be taken in the next 6-12 months</i></p> <ul style="list-style-type: none"> • The Thai Vocational Qualification Institute (TVQI) will be established within 2007/2008. In September 2005, the Vocational Education Commission approved the establishment of the TVQI. Accordingly, the committees were set up in 2006 to work on the establishment of the TVQI as well as the TVQ program. The committees expect to establish both the institute and the program within 2 years.

	Objective	Reform Measures Taken
D.	Reduce tariff to improve Thailand's competitiveness	<p><i>Measures taken over last 6 months and their significance</i></p> <ul style="list-style-type: none"> • On 1 September 2006, tariff rates of 82 items was exempted according to the Early Harvest Scheme under Thailand and India FTA. The tariff rates of these 82 items, which mainly includes industrial goods such as iron and steel, and household electrical appliance, and a few agricultural goods like fresh fruits and canned seafood, has been reduced continuously since 1 September 2004. Their tariffs were reduced to zero rates on 1 September 2006, according to the tariff reduction schedule. • According to the ASEAN Industrial Cooperation Scheme (AICO), the tariff rates for AICO products participated in the Scheme after 1 January 2005 were exempted⁴⁴. The tariffs of products participated before 30 July 2004 and during 30 July 2004 to 31 December 2004 were reduced to 5 and 3 percent, respectively. This tariff reduction was made retroactive to 30 July 2004. As of October 2006, 14 companies, mostly in automotive sector, have benefited from this scheme. The objectives of this scheme are to improve competitiveness of ASEAN companies, to support outsourcing and industrial complementation, and to stimulate investment among ASEAN member countries. <p><i>Measures to be taken in the next 6 -12 months</i></p> <ul style="list-style-type: none"> • Additional MFN tariff reductions will be effective on 1 January 2007. Currently, 73 percent of the total tariff rates is already under the three-band system i.e. 1% tariff rate for raw materials, 5% for semi-finished goods, and 10% for finished goods. According to the tariff reduction schedule approved in 2003 and 2004, another 2.2 percent of total tariff lines will be entered to the three-band system on 1 January 2007. These include, for example, iron and steel, copper, and plastic resin.
E.	Promote Thai exports to new markets	<p><i>Measures to be taken in the next 6 -12 months</i></p> <ul style="list-style-type: none"> • A framework agreement on Japan-Thailand Economic Partnership Agreement (JTEPA) is expected to be sign in 2006. Given the political uncertainty, the signing of the framework agreement on JTEPA has been postponed from end of April to later this year. • A tariff reduction under the protocol on the acceleration of liberalization on trade in goods and trade facilitation between Thailand and Peru will be effective. According to the protocol, Thailand and Peru agreed to reduce the tariff rates of items in the Early Harvest Scheme once the technical issues, in particular, the rules of origin have been agreed upon⁴⁵. In the latest meeting in June 2006, the two were able to agree on the rules of origin; however, the tariff reduction will not be effective until the agreement is signed in the upcoming months.

⁴⁴ To participate in AICO scheme, a minimum of two companies in two different ASEAN countries are required to apply for an AICO arrangement. Once the AICO arrangement is approved, the Certificate of Eligibility (CE) will be issued by the ASEAN Secretariat to participating companies.

⁴⁵The tariff rates of 50 percent of Thailand's total traded goods and 54.6 percent of Peru's total traded goods will be removed on the effective date.

	Objective	Reform Measures Taken
		<p><i>Measure planned to be taken but has been delayed</i></p> <ul style="list-style-type: none"> • Thailand-Bahrain FTA is likely to be renegotiated to include other members of the Gulf Cooperation Council (GCC) into the FTA. In the recent leader meeting in June 2005, Bahrain would like to renegotiate the previous framework agreement to include other members in the GCC and thus the Early Harvest Program agreed previously should be delayed.

* From this issue onwards, trade reforms will be combined with reforms to improve business and investment environment. Prepared by Wallada Atsavasirilert

4. Public Sector and Governance Reform^{46*}

	Objectives	Reform Measures Taken
A.	Improving public service quality by streamlining and redesigning work processes and procedures	<p><i>Measure taken over the last 6 months and their significance</i></p> <ul style="list-style-type: none"> • New Service Delivery Units have been established. After the law for establishing the new types of government agency called Service Delivery Unit (SDU) was approved in early 2005, two pilot agencies (i.e. Thai Mint Factory and Civil Service Training Institute) have been transformed into SDU. On July 2006, the Cabinet also approved another plan to transform GFMIS Bureau under the Ministry of Finance into an SDU. • To monitor government revenue, Government Financial Management Information System (GFMIS) is now able to link daily revenues collected by three tax collection agencies (Revenue Department, Excise Department and Custom Department). <p><i>Measures to be taken in the next 6-12 months</i></p> <ul style="list-style-type: none"> • To provide better and more convenient services to the public, Government Counter Service (GCS) or Service Link Unit (SLU) will be established in every province in Thailand within 2007.
B.	Changing roles, responsibilities, and rightsizing the government bureaucracy by restructuring public administration and improving intergovernmental relations at all levels	<p><i>Measures taken over the last 6 months and their significance</i></p> <ul style="list-style-type: none"> • The Cabinet approved the law to establish the Greenhouse Management Public Organization (August 15, 2006) which will responsible in developing, implementing and monitoring trade of greenhouse gas and reduce greenhouse gas emission. <p><i>Measures to be taken in the next 6-12 months</i></p> <ul style="list-style-type: none"> • The Ministerial Restructuring Plan is expected to be re-examined. Meanwhile, restructuring within ministries and departments can be done by each ministry and department. Each ministry and department has a restructuring committee which could work with the OPDC in their internal restructuring.
C.	Enhancing capacity and performance of public sector to efficiently and effectively perform their functions by reforming financial and budgetary system, reviewing system of human resource management and compensation, developing a new mindset, work culture and value, and modernizing government operation.	<p><i>Measure taken over the last 6 months and their significance</i></p> <ul style="list-style-type: none"> • The Government has used the three-year public investment framework (2007-2009) in preparation of the FY2007 government budget. The medium-term public investment framework is aimed to increase country competitiveness and improve efficiency of public investment. The NESDB, BOB and MOF have been working together to prioritize the capital investments based on their necessity to ensure that the public investment budget is well allocated and in line with the 10th National Economic and Social Development Plan. <p><i>Measure to be taken in the next 6-12 months</i></p> <ul style="list-style-type: none"> • The regulation on Controlling and Monitoring Civil Affairs in Provincial Government Offices is being reviewed by the State Council and is to be presented to the Cabinet. The regulation will empower the Deputy Prime Ministers to oversee the management of the provincial clusters.

* Prepared by Cheanchom Thongjen

⁴⁶ The objectives detailed in this matrix are consistent with the Government's Public Sector Development Strategy (2003-2007) and the more recent Public Affairs Management Plan.

5. Social Protection

	Objectives	Reform Measures Taken
A.	Develop social insurance mechanisms for the elderly and those affected by unemployment, work related injuries or other shocks to income	<p><i>Measures taken in the last 6 months and their significance</i></p> <ul style="list-style-type: none"> • The Cabinet agreed in principle on September 12, 2006 for National Health Security Office to take over the responsibility of managing and administering the Civil Service Medical Benefit Scheme (CSMBS) while keeping the benefit packages and the scheme's funding source unchanged. The aim is to streamline the administrative arrangements of these social schemes for greater efficiency. However, the Cabinet noted that the Strategic Plan for Transitional Development and Management of CSMBS and the Master Plan for Development of Beneficiaries Databases would require further clarification and revision on certain aspects, such as the composition of Management Committee for plan implementation and the integration of various information systems. The plans will be resubmitted for the Cabinet's approval once revisions have been made and are approved by the Review Committee. • The avian influenza control and surveillance and influenza pandemic preparedness have been improved by the Ministry of Public Health and Ministry of Agriculture and Agricultural Cooperatives. <ul style="list-style-type: none"> - The Ministry of Public Health is improving isolation rooms and facilities at community hospitals across the country. The target is for these hospitals to have at least 2 isolation rooms. Surveillance and control have also been strengthened: the surveillance and rapid response teams at every district are being prepared for action at a short notice and the table-top exercises have already started and will be rolled out to all provinces by the end of 2006. - The Ministry of Agriculture and Agricultural Cooperatives (MOA) are in the process of registering fighting cocks, encouraging better practices for free-range duck farmers, providing assistance to farmers, and standardizing compartmentalization practices. In addition, MOA is also collaborating at the international level with FAO and OIE and offering training and capacity building in diagnosis and surveillance to neighboring countries. The MOA and MOPH also discuss Avian Influenza Control and Surveillance and Influenza Pandemic Preparedness plans with APEC countries, and also cooperate with Japan for Thailand to be the resource center in the South East Asia. <p><i>Measures to be taken in the next 6-12 months</i></p> <ul style="list-style-type: none"> • The Tsunami Early Warning Arrangement in the Indian Ocean and Southeast Asia will be in operation from November 2006 onwards. The Arrangement has been financed by the Tsunami Regional Trust Fund to which Thailand provided seed money worth USD 10 million. Other international donors and countries have also contributed. The Early Warning Center will be established within the proximity of Asian Institute of Technology situated in Bangkok to send warning information to Myanmar, Cambodia, Vietnam and Thailand.

	Objectives	Reform Measures Taken
		<p><i>Measures to be taken in the next 6-12 months, but delayed</i></p> <ul style="list-style-type: none"> • The launch of the Social Security Scheme (SSS)’s extension to labor in the informal sector is planned for October 2006. Amendments to the laws, regulations, and/or procedures of the SSS’s extension have been drafted and will be presented to the Cabinet. It is envisaged that the scheme will operate on a voluntary basis. The Social Security Office (SSO) is finalizing details of benefit packages which will at least cover sickness, disability, old age, and maternity. The planned launch date of the scheme’s extension has been set for October 2006. However, the political uncertainty has delayed the process.
B.	Establish a safe work environment through standards and enforcement and increase labor market efficiency by facilitating job matches and placement	<p><i>Measures taken in the last 6 months and their significance</i></p> <ul style="list-style-type: none"> • Thailand’s Minister of Labor signed a memorandum of understanding (MoU) for sending Thai workers to the Republic of Korea with Korean Minister of Labor, Mr. Lee Sang Soo, on August 30, 2006. The MoU is for a period of 2 years with additional 20,000 Thai workers going to work in Korea, generating income of not less than Baht 6 billion. • Cabinet Resolution on June 16, 2006 approved the draft ministerial order on management of occupational safety and health and working conditions and environment relating to machinery, cranes, and boilers. The Cabinet agreed with the principles and instructed the Ministry of Labor to incorporate observations and suggestions from the Ministry of Industry before submitting it to the Council of State for review. • Thailand’s Ministry of Labor met with the Myanmar counterparts on August 28, 2006 to discuss setting up centers for verifying the nationality of Burmese migrant workers and for Thai employers to meet and employ Burmese workers to work legally in Thailand. Three points near the border – Tachilek (opposite Chiang Rai province), Kawthaung (opposite Ranong province), and Myawaddy (opposite Tak province) – will issue Certificates of Identity (CI) to registered migrants of Burmese nationality. Until now, the government of Myanmar was requiring that registered migrants go to Yangon to get their CIs, in practice increasing the difficulty of obtaining a CI impractical. <p><i>Measures to be taken in the next 6-12 months</i></p> <ul style="list-style-type: none"> • Concerns among employers prompted a review of bail-out fees for the new quota of migrant workers. The high bail-out fees have caused discontent among employers, prompting the Cabinet to set up a tri-partite working committee to resolve the issue by June 2006.

	Objectives	Reform Measures Taken
C.	Provide effective poverty alleviation and social assistance programs for those with limited or no other means of support	<p><i>Measures taken in the last 6 months and their significance</i></p> <ul style="list-style-type: none"> • Ministerial Order on Child Upbringing was issued and effective from August 22, 2006. The Ministerial Order issued by the Ministry of Social Development and Human Security covers 3 main areas: <ul style="list-style-type: none"> - <i>Laws and legal rights:</i> children who are born in Thailand must be registered for birth certificates; have lawful parents; receive the compulsory education; are entitled to health care benefits; and are covered under the national health security laws. - <i>Social environment and services:</i> children must be raised in an environment that is not harmful to their well-being; must have safe accommodation and live in a safe environment; are provided with a good level of learning and development, and are encouraged to participate in social activities. Parents must seek support from the responsible agencies if they cannot be in a position to provide such support. - <i>Upbringing:</i> Children in early childhood should be ensured sufficient food and nutrition, health and physical development, psychosocial needs, ethical values, and emotional skills. • Stakeholders sign MOU to Combat Human Trafficking. The Ministry of Social Development and Human Security (MSDHS) in partnerships with United Nations' Children Fund (UNICEF), Plan International (Thailand), and other involved organizations from 19 provinces in the North East and 8 provinces in the East signed a MoU on a Joint Operating Plan to Prevent and Combat Human Trafficking. Thailand has included human trafficking issues into the national agenda and provided Baht 500 million for MSDHS to manage and share this budget with relevant stakeholders. In addition, the committee has also approved the establishment of Human Trafficking Prevention and Combat Centers at 3 levels: national level (at MSDHS), provincial level, and in different countries to facilitate activities on a timely and effective manner. <p><i>Measures to be taken in the next 6-12 months</i></p> <ul style="list-style-type: none"> ○ The National Health Security Office (NHSO) and Department of Disease Control (DDC), Ministry of Public Health have signed a MOU and will draft a detailed workplan and programs on their collaboration to better manage anti-retroviral drugs/treatment for HIV/AIDS patients under the Bath 30 scheme. For the fiscal year 2006, starting October 2005, NHSO requested a budget amount worth Baht 4.4 billion, and has been initially allocated Baht 2.79 billion to provide services in the areas of HIV/AIDS testing, monitoring of asymptomatic HIV/AIDS patients, managing the use of anti-retroviral drugs (both first-line and second-line drugs), and HIV/AIDS patients' home visits as well as collaborating with non-governmental organizations working in the area of HIV/AIDS. The overall program is a joint operation between the NHSO and DDC, aiming at better management of the fund. Both agencies are now working toward drafting a detailed workplan and programs.