ADB

WORKING PAPER SERIES ON REGIONAL ECONOMIC INTEGRATION NO. 23

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December 2008

Asian Development Bank

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* A thematic version of this paper first appeared in July 2008 ADB Asian Economic Monitor, entitled "Dealing with Inflation: Policy Options for Emerging Asia". The author wishes to thank Jong-Wha Lee, Srinivasa Madhur and other participants at the Office of Regional Economic Integration workshop for useful suggestions and comments. Much appreciation also goes to Fidelis Sadicon, Esmyra Javier and Arnelyn Abdon for their research assistance. The views in this paper are solely those of the author.

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December 2008
Publication Stock No.

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Abstract

In the first-half of the global financial turmoil, rising inflation was a major concern for emerging East Asian central banks. Coupled with a slowing US economy, regional central banks faced an inevitable monetary policy choice of either addressing higher inflation or supporting moderate growth. Higher food and fuel prices were the major drivers of headline inflation. Their causes, however, were a confluence of factors—whether cyclical or structural, domestic or global, supply or demand—all reinforcing each other and contributing to widespread price escalations in all classes of commodities. In response, a raft of fiscal and administrative measures of questionable effectiveness was widely implemented. Understandably, different economies faced different balance of risks between price stability and growth, but to attribute the causes of inflation to supply shocks alone was misleading and probably explained why many central banks were reluctant and/or slow to raise interest rates. This was all the more puzzling given that inflation and inflation expectations were on the rise, and central bank credibility was not in abundance. Without much credibility, inflation expectations cannot be well-anchored. To gain credibility, a central bank must "walk-the-talk" and this is only possible if it has the autonomy to do so.

Keywords: Commodity prices, inflation, monetary policy, emerging East Asia

JEL Classifications: E31, E52, E58

1. Introduction

The crisis that began with turmoil in the US subprime mortgage market has morphed into a crisis of two halves. In the first, rising inflation was a major concern, the economic outlook, while weaker, was expected to remain robust, especially for emerging East Asia. In the second-half, the opposite has happened. Amid falling world commodity prices (downward inflationary pressures) driven by a severely weakened global economy, policymakers have aggressively eased policies to forestall further economic and financial deteriorations. This paper focuses on the first-half of the crisis.

In the first-half, central banks in the region faced a major dilemma in rising consumer prices and slower output growth. Higher interest rates would restrain rising inflation by lowering domestic demand, but also hurt output growth. Many central banks were uncertain how to respond. The challenge was rather a new experience: for a long time, monetary policy played a supportive role to economic growth with inflation never too menacing given rising productivity, plenty of spare capacity, and a generally disciplined fiscal disposition. Moreover, many argued that monetary tightening was unwarranted because inflationary pressures were coming from temporary supply problems, and for that matter, global supply constraints which they could not influence. Yet others felt compelled to act. They knew being more open and more energy intensive, their economies would be hurt more by a US slowdown, a major export destination, and higher imported inflation from sharply rising commodity prices. Also, more people would be hurt by higher food and energy prices as they not only spent more on those items, but being frequent purchases, they would also feel poorer, than people in developed economies.

This paper argues that the recent inflationary pressures were not caused by temporary supply problems alone, instead monetary policy facilitated the build-up of the high inflationary environment. As Milton Friedman famously puts it “inflation is always and everywhere a monetary phenomenon”—central banks’ involvement cannot be easy dismissed and they have a vital role to play to reverse the problem. The failure of monetary policy to respond pre-emptively risked repeating the mistakes developed countries made in the Great Inflation of 1970s, where the same excuse of temporary supply problem was vaunted and central bankers were ignorant that rising inflation expectations could trigger a price and wage spiral. True, weather disruptions or unanticipated supply hiccups can cause prices to spike; in such situations, monetary policy should not respond. If it did, it would exacerbate economic volatility even more. But what we witnessed was far more complex and could not be easily ascribed to domestic or global supply constraints alone. There was a confluence of cyclical, structural, domestic, global, supply and demand shocks at work, each reinforcing one another. This probably explained why many central bankers were grappling with the appropriate course of action.

In the rest of this paper, Section 2 presents the economies that were facing the dilemma of higher inflation and lower growth. Causes of high inflation are identified and discussed. And an assessment of the extent of the inflation pressures is made. Section 3 discusses the role of monetary policy in the context of global shocks, a major contributor to the high inflation environment and a major cause of uncertainty among policymakers. It also highlights the quintessential quality of central banks, credibility, in anchoring inflation expectations. Section 4 focuses on the fiscal and monetary measures introduced to combat high inflation. Constraints and challenges in monetary policy implementation in the different economies are also discussed. Section 5 concludes by highlighting policy considerations.

2. Output and Inflation Profiles

2.1 Economies Facing Monetary Policy Dilemma

As the subprime crisis took its toll from Wall Street to Main Street, growth forecasts for advanced economies were repeatedly revised downward, and regional growth prospects grew dimmer and dimmer (Figure 1). Softer global demand dampened exports, one of the region's primary growth drivers. But, in perspective, the region had not seen such remarkable growth in a long while. In 2007, all economies (except Thailand and the Republic of Korea) were growing at a pace faster than their average trend growth since 2000. The People's Republic of China (PRC) and Viet Nam showed signs of overheating, while Hong Kong,China and Singapore showed exceptional performance.

High energy and food prices became a particular concern to policymakers after hitting multi-year highs. The underlying inflationary pressures had its roots from the upward trend, particularly, in oil price, since 2002 (Figure 2). While crude oil rose steadily over the years, with prices doubled as early as 2005, international prices of major agricultural products like maize, rice, and wheat only caught up in mid-2007. Since end-2006, prices for food grains accelerated with renewed vigour, peaking in the first-half of 2008 by 179% for maize; 228% for rice, and 115% for wheat. Notably, the starkest price spike was rice, a major staple food for the region and inevitably a major headache for policymakers, which in the first four months of this year had more than doubled.

Slowing growth and rising inflation posed a major dilemma across the region. In Figure 3, Panel A, the comparison between 2007 growth and the 2008 growth forecast suggests output growth would shed an average of 1.6 percentage points in 2008, while inflation would increase by an average of about 6.2 percentage points. Viet Nam is likely to record a huge jump in inflation—by 16.7 percentage points from 8.3% in 2007—as the economy coped with the challenge of strained resources after over a decade of strong economic expansion. Cambodia would face a much bigger dilemma with a larger fall in output and an even bigger increase in inflation. Thailand remains the only economy expected to buck the trend with marginally better growth forecast for 2008. But this merely reflects its recent abysmal economic performance unsettled by political turmoil. That said, the trade-off is less acute if instead of the actual 2007 number, the eight-year average trend is used (Figure 3, Panel B). Indonesia, Lao People's Democratic Republic (Lao PDR) and Taipei,China still shows higher output growth rates in 2008 than their trend growth, while Lao PDR faces lower inflation than its average trend rate. For Cambodia and Viet Nam, the picture does not change, further highlighting the risks they face.

2.2 Inflation Landscape

High inflation was driven by food and energy prices in the newly industrialized economies (NIEs) and mostly food prices in the ASEAN4.[1] Emerging East Asia saw a visible pick-up in inflation from the second-half of 2007, and continued to ratchet to multi-year record highs in the first-half of 2008. By end-2007, headline inflation for the region had reached 5.3%, double the rate at the start of the year, and further escalating to 7.1% by mid-2008. At these levels, the inflation rates were already surpassing their target rates, naturally unsettling policymakers (Figure 4).

[1] The NIEs are Hong Kong, China, the Republic of Korea (Korea), Singapore and Taipei, China. ASEAN-4 are the four members of the Association of Southeast Asian Nations namely Indonesia, Malaysia, the Philippines and Thailand. In ASEAN4, a much stronger surge in energy prices would be expected following Indonesia's reduction of fuel subsidies in May and Malaysia's in early June.

For the region as a whole, surging food prices were the primary driver of the high inflation, averaging a double-digit rate of 12.4% since mid-2007, when prices picked up strongly, until April this year (Figure 5). For NIEs, over the same period, both food (up 5.3%) and energy (up 5.7%) were the key drivers. In the ASEAN4, it was mostly food prices (up 9.9%) with energy up 3.8%. In specific economies, in PRC, the rise in food prices was notable, averaging 17.4% (2.3% in 2006), due to the effects of the blue-ear disease, which reduced much of the country's livestock; the unexpected cold snaps in major farming areas; poor distribution systems; and ample liquidity. Taipei,China also suffered from bad weather (typhoons and a severe winter) which saw negative food prices for most of 2006 reversed to record strong increases in the later part of 2007. Viet Nam, too, suffered from animal disease, where double-digit food inflation persisted over the whole of last year and appeared to have peaked at an alarming 74% in June 2008. Similarly, Cambodia and Lao PDR suffered from avian flu which kept chicken prices and their inflation rates high. In contrast, the Republic of Korea (Korea) was affected more by higher energy prices. The Philippines stood out for the equally harmful effects of food and energy prices. In Singapore, too, food inflation had been a major problem, but in more recent months was joined by double-digit energy inflation. In Malaysia, headline inflation had risen, albeit with a lag, following food price increases even without the typical diseases or weather disruptions. Energy prices, which had remained stable because of government price controls, spiked after the huge reduction in fuel subsidies in June.

The region is extremely susceptible to higher food and energy prices, particularly the former, given an average household spends half of their total expenditure on food (37%) and energy (13%) (Table 1). Together their shares even surpass 60% in some countries like, Indonesia, Lao PDR, and Myanmar. Yet the share of food alone stands out in all economies and is particularly painful for people in the lower income economies, such as Cambodia, Indonesia, Lao PDR, Myanmar, the Philippines and Viet Nam, where food takes up more than 40% of expenditure. Moreover, because foods are perishables, they are purchased regularly and when prices rise rapidly, more pain will be felt. In contrast, only Korea spends more on energy than food (17% versus 14%). Its spending on food is also the lowest in the region and comparable to that of advanced economies.[2] That said, economies which are net food importers would lose out more; in the region, a majority of them would. Except for PRC, Thailand and Viet Nam, others would have to rely on imports to supplement and support domestic food consumption (Figure 6). The Philippines' position was most tenuous as the world's largest rice importer at a time when rice prices were on a vertical ascent.

2.3 Food and Energy Price Drivers

A confluence of factors was at play in contributing to rising prices, be it cyclical or structural, domestic or global, supply or demand, all reinforced each other and led to widespread price escalation in all commodity classes.

From the above discussion, the causes of high inflation may seem to be due to temporary domestic supply disruptions. In which case, central bankers could normally afford to hold their course and wait for the situation to return to normal. In truth, the fact that higher inflation was not only a regional, but a worldwide phenomenon, suggests something of a global nature was at work. A recent survey by the Wall Street Journal based on a panel of economists, neatly

[2] This is only true for spending on food. In the United States (US) and the European Union (EU), spending on energy is about 5%.

summarizes the main causes of higher food and oil prices (Figure 7).[3] By and large, the causes for both are similar. A majority sees the main cause as the strong global demand supported by buoyant global growth, especially from PRC, India and other emerging economies. For instance, developing Asia grew by an average of 7.4% since 2000 (6.7% in the 1990s). Looking at food, the rise in per capita incomes has meant increased food consumption in general and a shift to more expensive meat consumption, which pushed up prices even more as it takes more grains to produce a little meat. Likewise, population growth has contributed to the rapid demand growth. In the Philippines with the region's largest population growth, overpopulation is blamed for the heavy reliance on rice imports. The population of 89 million in 2007 was growing at over 2% annually from 2000, translating to 200 new born babies every hour.[4] Most disheartening, most were born into families already living in poverty.

Supply deficiencies also exacerbated a tight market balance amid growing demand. Years of low agricultural productivity kept grain yields low. For instance, rice yield growth fell to 1.1% from about 4.5% since the early 1960s (page 8, ADB 2008c). Productivity growth, in turn, had been severely limited by low capital accumulation and underinvestment in research and development. According to the International Rice Research Institute (IRRI), the IR8 rice variety introduced in 1966 was yielding 10 tonnes per hectare, now it only produced seven (The Economist 2008a). And a lot of it was eaten by rats. By one estimate, the amount was equivalent to the annual rice consumption in Indonesia (IRRC 2008). Agricultural supply was also curtailed and/or higher costs passed on to consumers as rising energy prices fed into increased input costs in fertilizer, fuel and power. In Asia, despite the large government subsidies, domestic energy price rose by 20-50%, and fertilizer, irrigation and transport costs, 30-50% (ADB 2008c). In addition, rapid urbanization and industrialization, especially in emerging economies, have created competition with agriculture for land and water.

Biofuel production—the diversion of agricultural production from food to energy, supported by government subsidies (ethanol in the US and biodiesel in the EU)—also received its fair share of blame. Estimates show 20-50% of feedstocks, especially corn and rapeseed in major producing economies, were diverted into biofuel production (IMF 2008a). Corn prices more than doubled over the last three years when biofuel production in the US rose from 6% to 23% of total crop. This amplified the price pressure on other commodities, which are close substitutes of corn (soyabean and palm oil) and, those which use corn as inputs to production (meat, poultry, dairy).

Public hoarding (through export bans and restrictions such as those in PRC, Cambodia, Thailand and Viet Nam) and panic buying (in the Philippines) further contributed to sustained price pressures. For rice, the problem was most acute because only about 4% of total production traded internationally. Hence, any news about supply disruptions amid dwindling stocks, especially by the large producing countries, like Thailand and Viet Nam, the two largest, easily triggered price spikes.

Global financial uncertainty, meanwhile, depressed returns on traditional assets, like bonds and equities. This pushed investors into alternative investment classes and, commodities, which were booming, became a top pick. The depreciating US dollar also forced commodity prices to rise since most commodities are priced in US dollar. In foreign currency (non-US dollar) terms,

[3] For more detailed discussion, see ADB (2008b). Note each factor's pie-share in the figure should not be interpreted as its degree of importance in driving higher food or oil prices. The survey is included to highlight the key drivers. Ultimately, which factor is more important is an open empirical question.

[4] Based on IMF's (2008c) database. The population could in fact be 93 million due to underreporting by poorer families, see The Economist (2008c).

this meant import became cheaper and, consequently, spurred higher demand; for exporters, it translated to lower income encouraging them to raise prices. As the US monetary policy was loosened, countries linked to the US dollar experienced easier monetary conditions, further boosting demand for commodities. Amid these developments, speculators jumped on the bandwagon, further pushing up prices by buying into commodity derivative markets.[5]

PRC and India were not the only key demand (global) factors driving up prices, domestic demand in individual economies facilitated by accommodative monetary policy also played a role.[6] From the plot (Figure 8), the rise in headline inflation in emerging East Asia is closely associated with the real GDP growth. (A similar pattern is broadly evident for food price inflation). The evidence is even more pronounced within the NIEs and ASEAN groupings. On the other hand, judging from the monetary indicators (money and bank loans), though the fit is not as good as for real GDP, the pattern of headline inflation moving together with loan and money growth since 2007 is highly suggestive of the accommodative stance taken by central banks (Figure 9). Again separating into NIEs and ASEAN shows a much clearer trend, particularly for loans.[7] Although, not shown here, the match with loan growth is very close in PRC, Hong Kong,China, Malaysia, Singapore, Thailand and Viet Nam. Alternatively, looking at changes in monetary policy stance, most economies were still in an expansionary or accommodative mode, before prices took off in the second-half of 2007, except for PRC, Korea and Taipei,China. In fact, monetary policy was still being loosened in Thailand (July 2007), Indonesia (December 2007) and the Philippines (January 2008), when prices started to rise.

2.4 Future Price Pressures

Before the global financial crisis took an unexpected sharp turn for the worse in September and the outlook of the global economy darkened considerably, the overall assessment in emerging East Asia was one of sustained price pressures characterised by inflation expectations that would remain elevated and supply constraints and demand changes that would take time to adjust.

Across the region, the rise in core inflation hinted at inflation expectations that had wavered and headline prices that would remain elevated in the near future. Core inflation rose steadily since the second half of 2007 to 2.7% in May, indicating a broad-based second-round effect was underway (see Figure 5). Apart from PRC and Taipei,China, other economies registered core inflation in their high single-digit. Reflecting higher inflation expectations, the term structure of interest rates in most countries had shifted upwards since end-June and end-December 2007 (Figure 10).

Rising inflation saw minimum wage increase in many economies. In the Philippines, a minimum wage increase that started in one region spread across the country. In PRC, the average urban wage picked up noticeably from the middle of 2007. In Shanghai, the minimum wage was increased for the second time in five months in March 2008 by 14%, Guangdong Province followed suit by 12% or more (Bloomberg 2008; Straits Times 2008). In Viet Nam, industrial

[5] For example, some US lawmakers and a money manager blamed commodities investor for causing the wild market volatility (WSJ 2008b). Nonetheless, a recent unprecedented data sweep by the Commodity Futures Trading Commission (CFTC) on the alleged culprits, “index traders” and “swap dealers”, provided no such support (CFTC 2008).

[6] In an empirical work, Jongwanich and Park (2008) find the current inflation surge is due largely to excess aggregate demand and inflation expectations, rather than external commodity price shocks. Frankel (2006) further shows, theoretically and empirically, that there is an inverse relationship between low real interest rates and high real commodity prices.

[7] Broad money is used. The fall in its growth during 2007 was very likely caused by the flight to quality (capital outflows) due to reassessment of risk from the ongoing subprime/financial turmoil.

disputes and strikes over wages and working conditions rose markedly. In 2007, the minimum wage for industrial workers was increased by about 25% (Asia Times Online 2008). Starting 2009, the minimum wage was set to raise by 15-29% (Wall Street Journal 2008a). In Malaysia, even before the recent headline and core rates jump, trade unions had demanded higher wages, following a salary increase given to public servants in 2007.

Given the widespread supply constraints, price pressures would unlikely dissipate in the medium-term. Improving agricultural productivity does not mean just buying new machines, but also having the right high-yielding and pest-resistant grains, which takes time to develop. Climate change has devastated major farming nations like Australia and Argentina, where the many years of drought and with no end insight will continue to substantially reduce production levels. Tackling scarcity of production inputs like arable land means addressing complicated land use issues, made more difficult by its political and social consequences, especially in emerging economies. Demand for commodities is by nature not very price sensitive, which means feedback to producers is often slow.

Strong global demand would unlikely wane in the medium to long-term. Biofuel production would continue given strong government mandates and lobby support. Rising demand from emerging economies, which is highly commodity-intensive, would persist as they carry on catching up with advanced economies. And government administrative controls would continue to muffle the price signals while reinforcing inflation.

A World Bank (2008b) forecast shows high food prices are not a temporary phenomenon and will persist in the medium term. For most crops, prices out to 2015 will not fall below the 2004 levels. In fact, long-term forecasts by the International Food Policy Research Institute (IFPRI) show the era of cheap food is well and truly over as prices for major grains continue to remain elevated above their 2000 levels through 2050. The same applies to meat prices (Rosegrant 2008). For oil, the latest medium-term report by the International Energy Agency (2008) shows most new supply will be coming on-stream in the next two years, tapering off in the medium-term, even as global demand recovers.

The recent fall in world commodity prices has brought much relief to consumers and policymakers alike, but there is concern that the next episode of rapidly rising prices is just around the corner. Current lower prices have encouraged producers to pull back investments, potentially setting the scene for a future high inflationary period when the world economy regains its growth momentum.

3. Role of Monetary Policy

3.1 Inflationary Pressure, a Global Phenomenon

The recent inflationary pressure was only one manifestation of the globalization phenomenon, one that had turned from tailwind to headwind. The close synchronicity of world stock market movements and long-term interest rates in major currencies are well documented evidence of the globalization process in financial assets—a process of greater price convergence arising from the deregulation of financial markets, the opening of the capital account and its accompanied cross-border flows. The famous “conundrum” in monetary policy decision making that Greenspan (2005) talked about, where hikes in the Federal funds rate were not matched by higher long-term rates, and the “global saving glut” explanation that his successor Bernanke (2005) offered, because of the Asian countries’ war chests of foreign reserves and oil exporting

countries' windfall petrol earnings, are basically manifestations of the financial globalization process.

In goods and services, however, the process of globalization is less complete; witness the discrepancies of the Economist's Big Mac Indexes in different countries. That said, the emergence of PRC, India and other low-cost developing countries in the global production chain has contributed to the "Great Moderation" of macroeconomic volatility enjoyed by many industrialised countries. See, for example, Stock and Watson (2002) and Bernanke (2004) for the US case. Other factors matter too, for example, deregulations of the capital and labour markets, leaner production techniques through just-in-time processes, and the advent of internet. Yet the role of central banks has been vital (Ahmed, Levin and Wilson 2002; Roberts 2006). There is now an international consensus, both in academia and central banks, on the importance of price stability as the overriding goal of monetary policy—the awareness and acceptance that by ensuring price stability, a more sustainable economic growth can be achieved. This growing consensus is best seen in an increasing number of economies which has adopted the inflation targeting framework since the Reserve Bank of New Zealand pioneered it in 1990.

There are two main channels through which globalization can affect cyclical inflation developments. First, with more foreign supply of goods in the market place, there is greater competition among firms. This has a dampening effect on domestic price and wage formation. Second, the globalization process itself has given rise to terms of trade shocks that moderate the rise of imported manufactured goods, while exacerbate increases in food and commodity prices. We were in a transitional inflationary environment where the tailwinds (from PRC and other's emergence in the global production chain that increase the global supply of goods), that had held prices down, was gradually giving way to the headwinds (from global strong demand for oil and other commodities), which was putting upward pressures on prices. On hindsight, the tailwinds might not have been entirely favourable. The strong tailwinds by pushing inflation below their targets encouraged central banks to reduce interest rates. Central banks were content to keep interest rates low without the usual signs of inflationary pressures. But in doing so, they sowed the seeds of the next asset price bubble. Borio and Lowe (2002) call this, "the paradox of credibility", where under a successful central bank anti-inflation regime, unsustainable expansion in aggregate demand does not show up as easily as before in rising prices of goods and services, but instead in asset prices. The unwinding of the US housing bust, its myriad and widespread consequences on the US and the world financial systems, and increasingly the global economy, demonstrates this.

3.2 Inflation Expectations and Credibility

There seems to be a conventional thinking that domestic monetary policy should only address domestic demand shocks and not domestic supply shocks due to say typhoons or drought; or international supply shocks such as major disruptions of oil supply. What about international demand shock coming from emerging economies' insatiable demand? Surely, domestic monetary policy cannot influence that either. Recent inflation arose from a confluence of factors that do not fit easily into the conventional supply or demand driven factors. Classifying price increases due to demand or supply factors helps to assess possible monetary policy responses, but admittedly it may not even be the right question to ask. Little wonder, then, many regional central banks waited so long to respond, while others just hoped the situation would go away.

A better question is whether the ongoing inflationary developments will lead to deviations of price stability later on. In other words, an assessment of whether the inflationary pressures are

permanent or temporary is a better start, bearing in mind the existing amount of spare capacity in the economy and potential second-round effects. Stable prices that central banks aim to achieve should never be a short-term goal. Because monetary policy works in long and variable lags, its impact on inflation and output is not immediately felt, but more in the medium to long-term. Above all, any interest rate decision made now influences inflation formation in the future, particularly that of prices and wages. If inflation expectations are well-anchored at low levels, a shock to demand means firms may raise prices by less when inflation is anticipated to be low. Similarly, workers may also demand a lower pay rise and be more prepared to enter into long nominal contracts. Under these conditions, more of the expansion in aggregate demand can feed into higher output and employment and less into higher inflation. The importance of well-anchored inflation expectations cannot be overemphasised. The failure of developed countries' central banks to recognise this, contributed in no small part to the Great Inflation of the 1970s. At that time, the idea of inflation expectations was not mainstream and policymakers were more accepting of the above conventional thinking.[8]

Credibility is essential in anchoring inflation expectations. In Blinder's 1999 survey, credibility is not only considered, by both academics and central bankers, as the most important attribute central banks should possess, it is also ranked, by both, as most important in keeping inflation low (out of six other reasons). Credibility simply means "walk the talk", that is central banks do what they say they will do. To gain credibility, many central banks are now committing themselves to an inflation target. The corollary is that central banks that have consistently achieved low inflation and better managed their economies have greater credibility. This means once low inflation is achieved, a more credible central bank is better able to maintain low inflation. Well-anchored inflation expectations and credibility therefore provide the extra leeway and flexibility in running a looser monetary policy without the huge price of accelerating future inflation. Blinder points out that from his experience in central banking circles, there is a general acceptance that greater credibility improves the short-run trade-off between inflation and unemployment. The aggressive interest rate cuts by the US Federal Reserve in early 2008 were very much based on the premise that inflation expectations had remained well-anchored, and the short-run trade-off between inflation and output, if any, would be small.

The short-run dilemma of price stability and output growth is not always present. In the case of a positive demand shock due, say, to a rise in consumer confidence, spending rises and actual output moves above potential leading to higher inflation. With higher output and inflation, a tighter monetary policy will bring both down—there is no short-run trade-off—stabilizing inflation is the same as stabilizing output. Sometimes, however, there can be a dilemma, such as a high oil price shock pushing inflation higher and, output lower. The dilemma occurs because a tighter monetary policy brings inflation lower, which is as it should be, but at the same time, it also depresses economic activity, which policymakers want to avoid.

Counterintuitive, as it may seem, research using the new Keynesian models shows stabilizing inflation actually contributes to overall economic stability. This result, as demonstrated by a range of models now called New Neoclassical Synthesis (for example, Mishkin 2008; Woodford 2003), comes from the fact that prices of different goods and services adjust differently at different times. This means monetary policy has to ensure sticky prices are stabilized as if prices of all goods and services are fully flexible in the long-run. If sticky prices are not held steady, while flexible prices are moving around, then it will be more difficult for their relative prices to adjust to the appropriate equilibrium level. Related to that, given the natural rate of

[8] Robert Lucas Jr., one of most eminent monetary economists and Nobel Prize laureate, only published his two key papers based on rational expectations in 1972 and 1976.

output is ultimately very difficult to measure, putting more weight on stabilizing inflation instead of output could actually achieve a better overall economic outcome. In a recent paper by Blanchard and Gali (2007), the authors find a greater commitment in maintaining low and stable prices in industrialized countries is key to explaining the improved policy trade-off in terms of reduced impact of an oil price shock on both inflation and output in the 2000s compared to the 1970s. The smaller impacts of the current oil price shock on inflation and output, are also found to be due to the lack of concurrent adverse shocks (the paper did not account for the US sub-prime problems and ensuing credit crisis); the smaller share of oil in production; and less rigidity in the labor market.

4. Fiscal and Monetary Measures Combating High Inflation

4.1 Administrative Fiscal Measures

Governments in the region had introduced a raft of administrative controls to contain the recent inflationary problems (Table 2). PRC and the Philippines did the most, while Singapore and Taipei,China, the least, but not necessarily the worst. On the contrary, both Singapore and Taipei,China (with the removal of the price ceiling on fuel in June 2008) had the least incentive distorting measures in place. In other economies, regardless whether the measures were politically expedient or well-intentioned, their effectiveness remained doubtful.

The most popular measures, price controls/consumer subsidies, usually do not really work, and if ever only very temporarily. They are difficult to enforce and easy to circumvent. In PRC, price controls implemented in early 2008 on pork and other staples saw prices continue to rise. In Malaysia, despite long-held price controls on many essential food items, even before the current inflation broke out, prices of food continued to rise and were in fact the main driver of headline inflation. Consumer subsidies such as cheaper fuel at the pumps also pose problems. They benefit the affluent by encouraging them to use more fuel (pushing prices even higher), buy bigger cars and pollute the environment even more. They also encourage smuggling to neighbouring countries where fuel is more expensive and create shortages in the domestic market. And they cause fiscal costs to balloon as oil prices rise such as in Indonesia and Malaysia[9]. In the Philippines, traders were caught repackaging subsidised rice and selling it at commercial prices.

Export bans to shore up domestic supply are equally problematic. Farmers feel particularly hard done by; after years of moderate prices, their much improved earnings are taken away by the authorities. In the unfortunate circumstance where local demand is over-met, harvests rot even as the world clamours for them.[10] Farmers may also switch to other crops not banned. This can create the very shortages that authorities want to avoid. In the meantime, neighbouring countries starved of supply see world prices continue to rise. It is said that export bans in Asia raised the cost of rice in the world markets by 75% (The Economist 2008b).

[9] Despite being a net petroleum exporter, on June 5, Malaysia raised its petrol price by a massive 40%. Diesel and electricity also went up. Petrol prices are still subsidised and pump prices will now be reviewed twice-monthly.

[10] Cambodia lifted the ban on rice exports for three provinces due to difficulty in processing and storing newly-harvested supply.

4.2 Monetary Policy Actions[11]

Not all regional economies tightened monetary policies, plausibly reflecting the different balance of risks between inflation and output in each economy and/or indecisions. A quick glance at the monetary policy rate changes since June 2007 to end-August 2008 (Figure 11) does not seem obvious that the region was facing any significant inflationary problem. Only Viet Nam and Indonesia made significant tightening, yet as will be argued later, they were in fact rather tardy in doing so. Besides interest rate increases, policymakers also allowed exchange rates to appreciate. (Figure 12) encapsulates the exchange rate changes and policy rate changes of the regional economies on one chart. The size of the bubble refers to the degree of policy tightening since end-June 2007, in which case Viet Nam has the biggest bubble—the highest degree of tightening. Nonetheless, in real terms, because of its very high inflation rate, its policy rate still remained negative, the most negative of all the economies. In addition, over the same period, in terms of exchange rate changes, the dong had actually depreciated against the US dollar. So on both scores, monetary conditions in Viet Nam remained loose, despite the aggressive tightening. On the whole, only PRC had somewhat tighter monetary conditions, and only because headline inflation fell from its February peak.[12] Even in Singapore, Taipei,China, Malaysia and the Philippines, though their exchange rates had appreciated more, monetary conditions remained loose as real interest rates still stayed in the negative zone. In sum, overall, monetary conditions in the region were largely accommodative or expansionary rather than anti-inflationary.

The prospect of higher future inflation was a real concern, given inflation expectations and core inflation were rising and central bank credibility had never been firmly rooted. Besides the upward shift in the term structure of interest rate over time (Figure 10), forecasts by professional economists and ADB for 2008 all show an increase in inflation expectations across the region (Table 3). Nonetheless, in some economies, inflation expectations appear to be better anchored than others: Taipei,China; PRC; Hong Kong,China; and Korea.[13] In addition, based on the crude measure of inflation track record, Malaysia's and Singapore's monetary authorities appear the most credible comparable to the US Federal Reserve (Table 3). Hong Kong,China, Taipei,China and Thailand also have a decent inflation track record.[14] Indonesia is the outlier with a very high double-digit inflation rate; Korea and the Philippines fare better than Indonesia, but not in the aforementioned groups. Interestingly, the latter three countries, including Thailand, are the only inflation targeters in the region, a probable reason for adopting the inflation targeting framework. Yet despite the generally benign inflationary environment in recent times, inflation targeting did not readily produce a low inflation record. The inflation targeters' track records (numbers in square bracket in Table 3) are not much better than non-targeters'.

4.3 Challenges and Constraints in Monetary Policy Manoeuvrability

Individually, different economies faced different trade-offs, challenges and constraints. By having greater credibility, some would have more room to manoeuvre than others and could alleviate the costs of trade-offs. Based on the monetary policy moves up to August 2008,

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[11] To be consistent with the focus of the paper, monetary policy actions discussed here end in August 2008, unless otherwise mentioned.

[12] In Figure 12, the real policy rate was calculated based on the headline inflation rate in August.

[13] The rise in inflation forecast for 2008 is expected to be less than three percentage points from actual 2007.

[14] Based on earliest available data from 1982, Hong Kong's average inflation would have been 4.7%. Viet Nam and PRC's records are skewed by the time period selected. For example, Viet Nam had a bout of hyperinflation not too long ago in the late 1980s/early 1990s.

economies can be put into three groups. The first comprises Hong Kong,China, Brunei, Cambodia and Lao PDR, where there is little or no direct control over monetary policy. The second comprises most other countries that tightened policy but with varying degree and regularity. The third, Malaysia, the only country that kept interest rates steady throughout the period.

Hong Kong,China's flexibility in dealing with the dilemma was almost absent given its linked exchange rate system with the US. For most parts, Hong Kong,China adopted the unwelcome US expansionary monetary policy in an already tight labour market, booming property sector and rising inflation environment. Its weakened currency also translated into higher cost of import from rising PRC prices, its major source of food imports. On the flip side, however, its strong fiscal position allowed the government to undertake appropriate short-term counter measures to address rising food prices.

Brunei's "monetary policy" in essence was also contracting, thanks to the currency board system it has with Singapore. This helped to contain any inflationary pressure without the need to tap its huge fiscal resources.

Cambodia and Lao PDR as highly dollarised economies also has little control over monetary policy. The bulk of currency used as a medium of exchange and as store of value is foreign currency—95% in Cambodia and 80% in Lao PDR.[15] Much like other fixed exchange rate regimes, they were importing the lax US monetary policy, although baht is also commonly used in Lao PDR. Given the build-up in domestic pressure from years of strong economic growth, such boost was clearly undesirable as it fuelled further inflationary pressures. For Lao PDR, any form of monetary policy action was also constrained by the very weak banking system and troubled state-owned enterprises (see country chapter in ADB 2008a; IMF 2007a). In Cambodia, bank lending to the private sector surged strongly by 76% in 2007 and its concentration in the booming real estate market deserved closer scrutiny (see country chapter in ADB 2008a).[16] In both countries, fiscal policy must play a key role, which thus far only involved various administrative measures. If more targeted assistance is required, Cambodia is in a better fiscal position to raise funds.[17] In this regard, multilateral and bilateral lenders should be more forthcoming on humanitarian grounds to ensure gains through decades of poverty alleviation not be set back. In ADB's 2008 annual meeting, the bank agreed to contribute $500 million to the hardest hit countries to assist the vulnerable, poor and needy, and another $2 billion to boost agricultural output through lending to agricultural, natural resources and infrastructure projects.

Among the economies that tightened, PRC and Viet Nam were most aggressive, albeit for Viet Nam, it waited too long. For both economies, a tight monetary policy was appropriate as strong domestic demand and overheating signs were clearly evident. In PRC, because unexpected diseases and bad weather were the main contributors to food price increases, some argued that monetary policy should have no part to play. Nonetheless, this ignored the already heightened inflation expectations. The newly introduced labour reforms were raising minimum wages at a time of accelerating headline inflation and an economy already operating at or near full potential.

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15 Percentage share of foreign currency in total currency in circulation, as per Downes (2007). The number varies depending on year and definition. For example, it is 50%, as quoted by the central bank of Lao PDR in Menon (2007). Based on the definition of foreign currency as a share to M2, the numbers were 69% for Cambodia (in 2003) and 63% for Lao PDR (in 2004) according to Watanabe (2006).

16 The ratio of private sector credit to GDP was still low at around 19%.

17 Cambodia has a much lower level position of public debt over GDP compared to Lao PDR's (31% vs. 62%)The bulk of their public debt is external borrowing – 95% and 98% in Cambodia and Lao PDR, respectively (IMF 2007b; IMF 2007c). Both countries have consistently recorded a fiscal deficit, albeit it has come down in recent years.

While the central bank had continued to hike interest rates and statutory reserves ratio, monetary conditions were still loose. A positive development was the greater appreciation in the renminbi since early 2008, albeit the appreciation had slowed after April.

Monetary policy effectiveness in PRC is constrained by various controls in the monetary and financial system. The People's Bank of China sets a ceiling for the deposit rates and a floor for the lending rates, which stood at 4.14% and 7.47% respectively at end-August. With most months' inflation rates close to high single digits, these rates were mostly in negative territory, which meant monetary policy was essentially encouraging further consumption and investment in an already highly pressurised inflation environment. Higher interest rates would be helpful to contain demand pressures, but they would also attract more capital inflows. Efforts would then be placed on sterilizing the inflows through the central bank bills and/or letting the currency adjust. But sterilizations would have to contend with rising cost from widening interest rate differentials with the US. As part of its arsenal, the statutory reserve requirement ratio was increased to lock-in the excess liquidity, which stood at 16.5% in August.

Above all, the lack of renminbi flexibility was a constant hindrance, but with few viable remedies. The perceived undervaluation of renminbi (and hence potential revaluation and opportunity on the upside) and the declining US interest rates meant that it was attracting a large amount of capital inflows. The difficulty and inability to completely sterilize these inflows could stoke inflationary pressures in goods and services, and assets. While freeing the renminbi completely was out of the question, some mooted a one-off revaluation large enough to eliminate the expectation of appreciation. The central question was what would this level be? If it was too large, it would not be acceptable in the current period of slowing growth. It also risked creating sharp swings in capital flows, which destabilized the financial system, and causing massive dislocation in the export sector, without the benefit of eliminating the expectation of appreciation.

In the case of Viet Nam, its inflation rate for 2008 would likely be in double digits, and among the highest in the region. Its real interest rates which had been hovering around the zero percent level for several years turned negative since the second half of 2007. This added fuel to already strong domestic demand, money and loan growth and to a bullish property market. Belatedly, the government tightened policy in January 2008, raising the benchmark rate by 50 basis points (bps) to 8.75%, the first time in two years. It also increased the reserve ratio to 11%, mopped up liquidity through Treasury bills and limited loan growth to 30% in 2008. More notably, from 10 March, it allowed the dong, which is de facto pegged to the US dollar, to fluctuate within a larger band of 1% daily from 0.75%.[18]

In Viet Nam, monetary policy efforts to arrest high inflation could be described as uncertain and haphazard. There was a noticeable lack of autonomy and a strong assertiveness by some quarters of the government to continue the strong growth strategy even at significant costs. From the beginning, it was not clear that the government's overriding goal was to tame inflation. The fact that the dong depreciated rather than appreciated, [19] since it was allowed to move more flexibly in early March, suggested that the government was tentative in fighting inflation with all its available ammunition. Instead, it reflected the desire to bolster the export sector (and the economy) and to reduce the huge trade deficit. But the trade deficit was unlikely to fall if exports remained high as the bulk of the country's imports comprised intermediate goods.[20] An

[18] On 24 December 2007, the band was widened from ± 0.5%.

[19] The depreciation was most remarkable because it reversed all gains the dong/USD exchange rate made from September 2007.

[20] Data for 2006 showed fuel and raw materials took up about three-fourth of total value of imports.

appreciating dong, on the other hand, would be useful to "restrain" the export sector to let some steam out of the overheating economy. And being an exporter of farm produce, Viet Nam would still reap the reward of higher commodity prices, that is, some parts of the export sector would remain buoyant.

The central bank, State Bank of Vietnam (SBV) often struggled to mop-up the overhang liquidity in the financial system. It was very much absent in 2007 when capital poured in after Viet Nam accession into the World Trade Organization. Broad money surged by 47% in 2007, as a result, and credit grew by an incredible 50% (IMF 2008b; World Bank 2008a). The very limited flexibility of the dong and its gradual appreciation further enticed speculative inflows. These, together with the continued expansionary fiscal spending and supply constraints, laid the foundations for sharp price rises. When the central bank finally acted in early February 2008, it ordered banks and credit institutions to buy bonds totalling VND20.3 trillion. Around the same time, the required reserves ratio was also raised. These caused the stock market to dive further as fears took hold that banks would curtail lending to investors. When banks started bidding aggressively for deposits, due to a shortage of liquidity, they were told to limit the deposit rates at 12%, a likelihood that the central bank was unprepared to see interest rates drifting higher. Previously, the rates were market determined. Interestingly, since then, the State Treasury had failed, six times in a row, to sell any government bonds through auction, again a likely reflection of the continued shortage of liquidity in the financial system (Thanh Nien News 2008b).

Later, SBV appeared to have reacted with overzealousness. On 19 May, it raised its benchmark rate by a huge 325 bps to 12%.[21] Banks could charge deposit rates at the maximum of 18%. On 11 June, these rates were again raised by 200 bps. Such aggressive moves raised the question whether the banking system was adaptive and robust enough to adjust to such large swings in interest rates. More importantly, it raised the question whether borrowers would be able to continue servicing their loans. The renewed and aggressive mandate of SBV could mean the government had finally made inflation control a priority by accepting a lower growth.[22]

In Indonesia and the Philippines, policymakers denied the problem of high inflation for a long-time, preferring to blame supply shocks which they said were beyond their influence. In Indonesia, the headline inflation rate had surpassed the target rate since June 2007, while in the Philippines, since March 2008. Neither the rupiah nor the peso provided much resistance against external inflationary pressures—both had largely depreciated against the US dollar, more so, in the case of rupiah. Being newly independent central banks—Bank Indonesia (BI) in 1999 and *Bangko Sentral ng Pilipinas* (BSP) in 1993—both institutions lack credibility which has not been helped by their chequered inflation track records and now worsened by incomplete understanding of the nature of the inflationary pressures.

In a surprise move from an unscheduled meeting on 6 May, BI finally raised its policy rate by 25 bps to 8.25%, emphasising the need to maintain "expectations ahead" of the government's reduction in fuel subsidies of about 30%. It also indicated its preparedness to increase rates further. True to its words, it had done so every month by the same margin reaching 9.50% in October. This change in stance coincided around the time of the appointment of the new Governor, Boediono, who stated emphatically that combating inflation was one of the bank's main tasks in the near term.

[21] SBV also raised its refinancing rate to 13% from 7.5%, the rate it lends to banks, and the discount rate to 11% from 6%, the rate it borrows from banks.

[22] According to Thanh Nien News (2008a), the government had reduced its growth forecast for this year from 9% to 7%.

In a similar vein, BSP finally raised its policy rate by 25 bps in June, yet continued to cite supply pressures as the main culprit which had fed into demand. This, together with the belief that inflation would moderate with global economic activity, was the usual justification for keeping interest rates unchanged earlier. It remained a puzzle that the bank had for so long been prepared to live with rapidly rising inflation and inflation expectations. For instance, within a short six months to June 2008, the headline inflation rate had risen by 7.45 percentage points, and core by 4 percentage points, while the minimum wage in all regions was also increased. None of these facts concurred with well-anchored inflation expectations. Encouragingly, the bank finally took heed of these developments and raised the policy rates further in July (25 bps) and August (50 bps) to 8.0%.

In Korea, a major constraint the central bank had in tightening monetary policy was that it contradicted the goal of the newly elected government. There might have been pressure within Bank of Korea (BOK) to play a more supportive role, particularly following its recent below par growth performance. But BOK was clearly on a tightening mode in August 2007, the last time it raised rates. Since then, however, holding interest rates steady increasingly meant a supportive stance as inflationary pressures began to build-up and the monthly inflation rate began to surpass the target rate. Moreover, the won, being the most depreciated currency in the region, did not provide the needed help to ward-off high commodity prices. It was no surprise that in all BOK's Quarterly Consumer Survey Indexes since September 2007, consumers were expecting prices to rise by much more.[23] The longer the rate was held steady, the more likely inflation expectations would unmoor, and the more likely it would dent BOK's credibility in pursuing its set inflation target. In August, with the headline inflation above its target since November 2007, BOK finally raised the base rate by 25 basis points, acknowledging " ….inflation expectations that have gathered strength …. " (BOK 2008).

Thailand was perhaps the only economy in the region that faced higher inflation and also higher growth in 2008. Its core inflation rate while steadily rising, only surpassed the target of 0% to 3.5% in June. But rather unsettlingly, the headline inflation was picking up very quickly—by 5.7 percentage points to 8.9% from end-2007. At the level and rate core inflation was moving, it was to be expected that Bank of Thailand (BOT) would not shift its monetary policy stance any time soon, despite the rapidly rising headline inflation and strong domestic demand expansion. BOT did raise its policy rate in July 2008 by 25 bps, after the core rate stayed above the upper target for two consecutive months. In the recent inflationary environment, targeting core inflation clearly had its flaws. It underscored the asymmetric response of monetary policy towards global shocks. By excluding food and energy prices, the persistently strong global demand for raw materials by PRC and others were left unaccounted for, meaning central banks were increasingly falling behind the curve. Typically, when prices continue to rise for a long while, expectations of higher future prices become self-fulfilling and a central bank's inaction adds to the process: BOT risked falling into this trap.

For Singapore, managing the Singapore dollar exchange rate remains a very useful monetary policy tool given the country's openness of close to 500% of GDP. A sharp appreciation of the Singaporean dollar could easily solve the inflation problem, but that would also decimate its export sector, particularly its biggest, electronics, at the same time. Without any agricultural produce to speak of, and lacking natural resources, it cannot plant more paddy and drill more oil to get itself out of the predicament. But what it has is deep credibility from its impeccable macroeconomic track record, allowing the pursuit of a balancing act that minimizes the current

[23] A separate monthly consumer survey showed inflation expectations were on a steady upward trend since December 2007.

dilemma. A steeper but gradual appreciation of the Singaporean dollar, by better anchoring inflation expectations, was one move that reinforced its credibility.

Policy decisions in Taipei,China were also moving in the right direction. This was aptly summarised as "a policy of continuing hiking rates at a moderate pace [that] will help eliminate inflation expectations, facilitate reasonable funds allocation and long-term stability in the financial market"[24]. The central bank was also mindful of downward trending real interest rates. Most noteworthy was the tightening bias against a backdrop of inflation around 4%, an inflation forecast of about 3% in 2008, and an expected lower, but still solid according to the central bank, output growth of 4.3% (5.7% in 2007). For rear-view central bankers, such an inflationary scenario would be considered as benign and requires no further action. And with lower forecast growth, tightening would be easily dismissed.

Malaysia was the only country that did not change its monetary policy stance even as fuel subsidies were reduced by 40% and inflation and inflation expectations were clearly on the uptrend. Bank Negara Malaysia (BNM) believed that whatever pressures there were, would be temporary, implying the economy would not face any out-of-control wage-price spiral. BNM might draw comfort from its good track record of steering the economy and that previous inflation peaks were externally driven and transitory. Had it not been for the global financial turmoil impacting on the global economy and hence lowering world commodity prices, BNM's inaction would be an interesting counterfactual experiment vis-à-vis other central banks that tightened. Perhaps, BNM saw no conditions where a wage spiral could take off, even if prices were rising. And that consumers would just have to bear with a "one-off" fall in their real income. It remains to be seen had prices continued to rise, would nominal wages stay unchanged, and for how long.

5. Policy Considerations and Conclusions

The conventional view that monetary policy should not respond to "temporary" adverse supply shocks is too simplistic. This appears to be the basis upon which many emerging Asia central banks made their monetary policy decision (or lack thereof). But this is highly problematic. First, the high food and energy prices were not caused by supply problems alone. They reflected a confluence of factors that ranged from, strong demand for soft and hard-commodities in PRC, India and other emerging countries, to diversion of food crops for biofuel productions, to the US weak dollar policy, to pure profit instincts. Second, it corners central banks to classify all shocks neatly into categories like demand and supply shocks, as if one type of shock always dominates and monetary policy should respond accordingly. Again the above factors do not easily fit into these categories. Even if they do, monetary policy response is still at a loss, when the factors are a confluence of cyclical, structural, domestic, global supply and demand shocks. Third, it highlights the flaw in the core inflation target, in particular by not accounting for food and energy price pressures, when there was overwhelming evidence to show the pressures were not temporary.

The persistence of shocks counts more than easy classification of shocks—uncontrolled it would easily lead to the unmooring of inflation expectations. Even if central banks agreed that the demand from PRC and other emerging countries mattered, they could not help but wonder what to do. Again, trying to classify things neatly, they doubted whether *domestic* monetary policy could influence *global* demand. Actually that does not matter. If domestic prices are

[24] Central Bank of the Republic of China (Taiwan) 2008.

expected to remain high (regardless of the type of shocks) and locals are the ones who face higher prices—domestic monetary policy still has to respond. The fear is, if not, it will seep into the mind of consumers and hence inflation expectations, particularly in an already strong growth environment. According to Jean-Claude Trichet (2008), President of the European Central Bank, the key is to prevent possible nominal second round effects to materialize—to avoid "…. disanchoring of inflation expectations .... as price setters and social partners … [give] permanent status to the otherwise transitory price increases". Mervyn King (2008), Governor of Bank of England, puts it even more strongly that temporary price increases cannot be ignored: "In judging how far inflation is likely to fall next year, we have to gauge the extent to which high inflation in the short-term will enter the expectations of those setting prices and pay. If it does so, then without some margin of spare capacity, inflation will have some tendency to persist above the target". In the context of emerging Asia, this statement is most aptly applied to PRC and Viet Nam, albeit without much credibility to start with, all regional central bankers should take heed for even "temporary" price changes cannot be easily dismissed.

Credibility is an indispensable attribute that keeps inflation expectations well-anchored. But central banks must be seen to be doing so. As Glenn Stevens (2008), Governor of the Reserve Bank of Australia, stresses "one of the most important jobs of monetary policy is to condition expectations. To achieve that, people have to believe we will do what is required to control inflation ….."—inflation expectations matter and the central bank's credibility is key to ensure that they stay in line. Even the supposedly more credible inflation targeters in the region, did not actually look credible in deeds, at least Indonesia took more initiative. In comparison, monetary policy actions by Singapore and Taipei,China looked far more credible. Yet they are no model of transparency and commitment like that the inflation targeters purported to be.

Credibility is very difficult to earn. Just ask Paul Volcker, the former Chairman of the US Federal Reserve who broke the US inflation's back. He did it by raising interest rates to close to 20%, and resulted in two back-to-back recessions in the early 1980s, and the highest unemployment since the Great Depression. As Frederic Mishkin, a board member of the US Federal Reserve, puts it "Volcker's triumph over inflation was achieved because he obtained credibility the hard way—he earned it". What is also salient for emerging Asia to note is the inflation legacy which Volcker had to fight was brought about in large part by the Fed Reserve's policy to stimulate the economy, instead of addressing the spiking inflation, triggered by the first oil price shock. Its mistake was it ignored rising inflation expectations which eventually led to a runaway wage-price spiral. The UK, Australia and New Zealand, to name but a few, also had similar experiences, where eventually recessions had to be engineered to bring high inflation down.

Central bank autonomy, fiscal discipline, openness and transparency are key prerequisites for greater credibility. Without autonomy from political interference, a central bank will be held ransom by politicians to pursue agendas that could essentially benefit and enrich the politicians themselves. Viet Nam is a classic example where the lack of autonomy renders monetary policy impotent. Many emerging Asian central banks are not truly independent from the government, even if it may appear so legally. Singapore's and Malaysia's monetary authorities are, by most standard measures of independence, not independent. Yet they are the two most credible central banks in the region based on their inflation track record. Instead, what they have is a responsible government with good fiscal discipline and generally sound economic management practices.

That said, credibility can be lost more easily than it is gained. Hence, mechanisms need to be in place to ensure that credibility can be nurtured and improved. Greater openness and transparency helps central banks to be more accountable, autonomous and it improves

monetary policy effectiveness—it provides the means to enhance credibility. The public must have good understanding of the policy objectives and strategies of the central bank. The more clearly it is spelled out and acted upon, the better understanding and confident the public has in the workings of the central bank, and the better inflation expectations can be well-anchored. Inflation targeters are certainly more open and transparent in this case as required by the inflation targeting framework. Still non-inflation targeters like Singapore and Malaysia have done well in this area, Hong Kong,China, too. In spite of that, much improvement can be had judging from the practice of the champions of openness and transparency of the Reserve Bank of New Zealand and the Swedish Riksbank.

Adequate human capital, monetary policy microstructure and financial sector developments would be the priority in smaller economies. Greater efforts should be made toward financial deepening allowing more people to move into the financial sector proper, not only for better allocation of resources, but also for more effective macro-management of the economy. For these late comers, assistance could often be sought from other more experienced central bankers who have trod this path so as to avoid the mistakes and jump-start the development process. A proper framework of instruments and institutions for monetary policy to operate should also be in placed. Last but not the least, there must be a core group of properly trained and learned technocrats in the central bank who understands the modern intricacies of monetary policy management. Together with an astute and ethical governor, the central bank could in fact win the trust of the government to allow it to operate with greater autonomy. Still such arrangement is no substitute for properly entrenched institutional structure that ensures continued central bank autonomy, the common beacon of professionalism and integrity in the government.

Close co-ordination of monetary and fiscal policies is key to sound macroeconomic management. Central banks in developing economies are often the main financial advisor to the government. In most instances, they are also the chief economic advisor. It is in these capacities, and related to the quality of human capital mentioned above, that central banks are best placed to influence the directions and goals of macroeconomic management. It is not difficult to find that a key success factor behind the impressive track record of the more credible emerging Asia economies lies in the very close co-ordination between monetary and fiscal policies—both levers working in sync, clearly identifying priorities and mustering the necessary resources to achieve them.

Events in the second-half of the US subprime crisis have brought much relief on the inflation front but at the expense of substantive downside risk on growth. While central banks' fast reactions to lower interest rates are commendable, their asymmetric behaviour in response to high inflation reinforces the common perception that they are soft on inflation. The fear is this experience will be incorporated in future wage and price setting behaviour that bears little resemblance to well-anchored inflation expectations. Therefore, when the next period of high inflation comes, greater responsibility will be placed on the central banks to change that view and they can only do so through words back up by actions.

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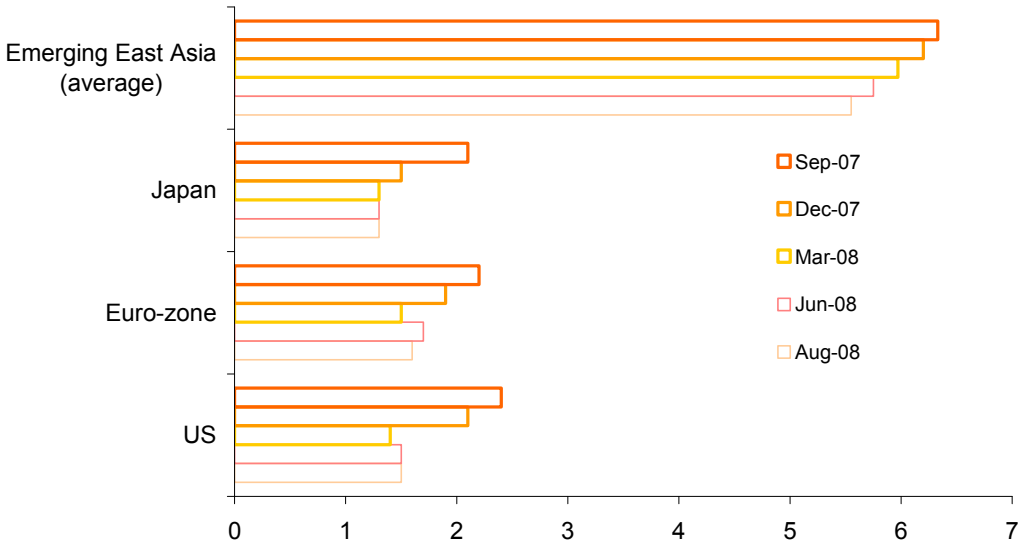
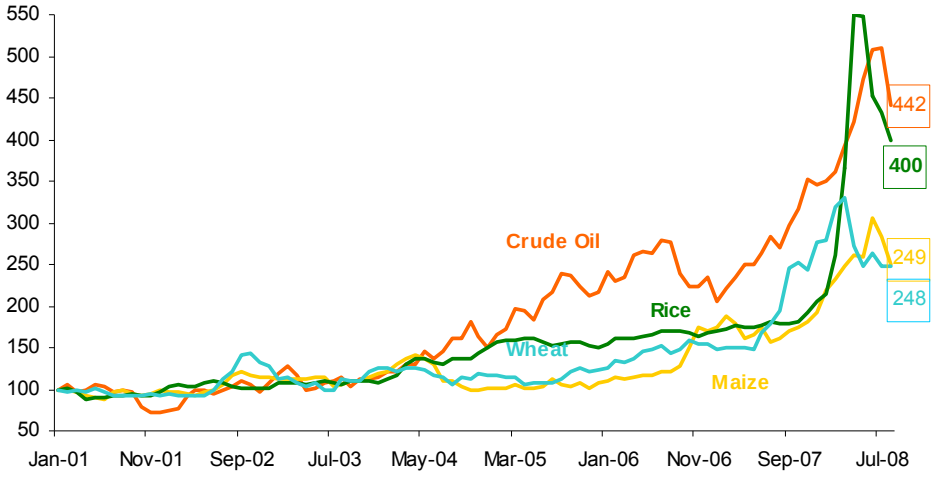
Figure 1: GDP Growth Forecasts[1]



[1] Forecasts of various issues: Sep 2007, Dec 2007, Mar 2008, June 2008, and Aug 2008.

Sources: Consensus Economics Inc., Consensus Forecasts, various issues.

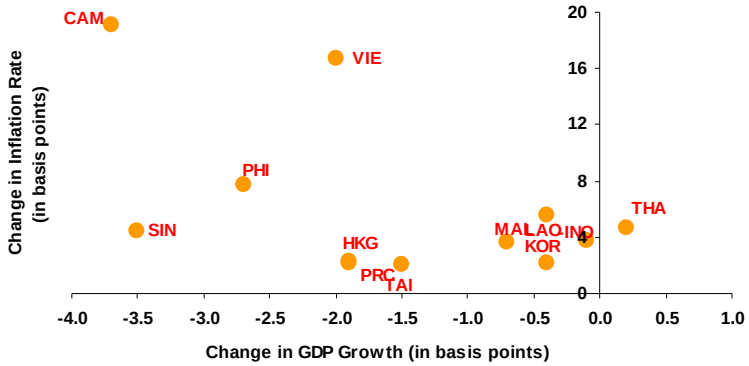
Figure 2: Commodity Price Indexes (Jan 2001=100)



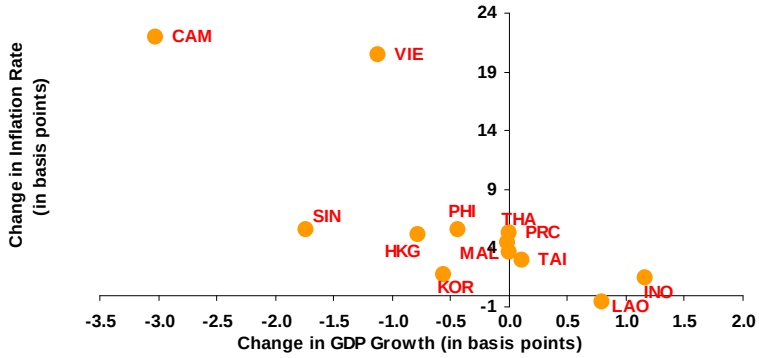
Source: IMF Primary Commodity Prices.

Figure 3: Higher Inflation and Lower Growth Economies

Panel A: Change in Inflation and Output Growth: Forecast[1] (2008) minus Actual (2007)



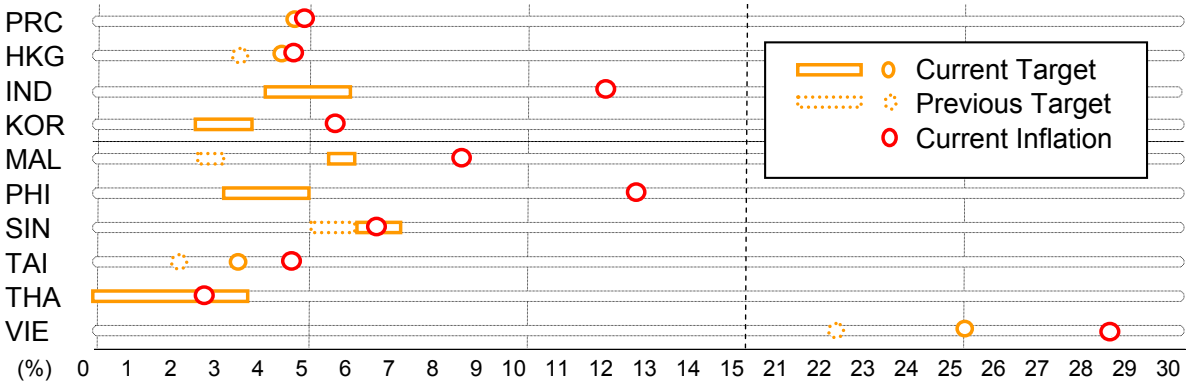
Panel B: Change in Inflation and Output Growth: Forecast[1] (2008) minus Average (2000 to 2007)



[1]Asian Development Bank. *Asian Development Outlook Update*. September 2008.

Sources: Asian Development Bank, Asian Development Outlook, September 2008 and national sources.

Figure 4: Inflation Rate in 2008: Current Month and Target/Forecast

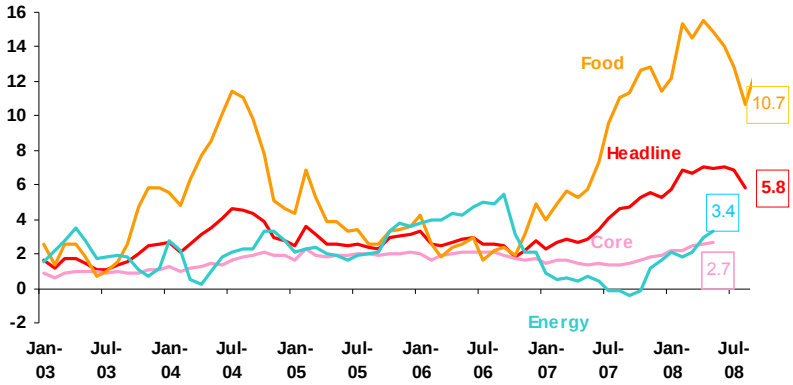


Notes: All y.o.y headline inflation in August; Thailand refers to core.

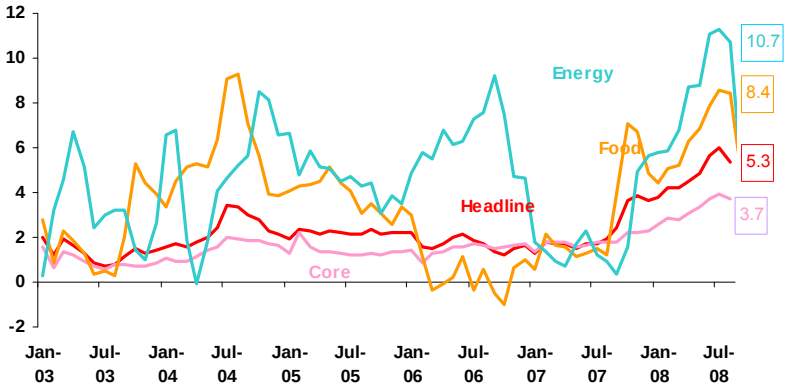
Sources: CEIC and national sources.

Figure 5. CPI and Its Components (y-o-y, %)

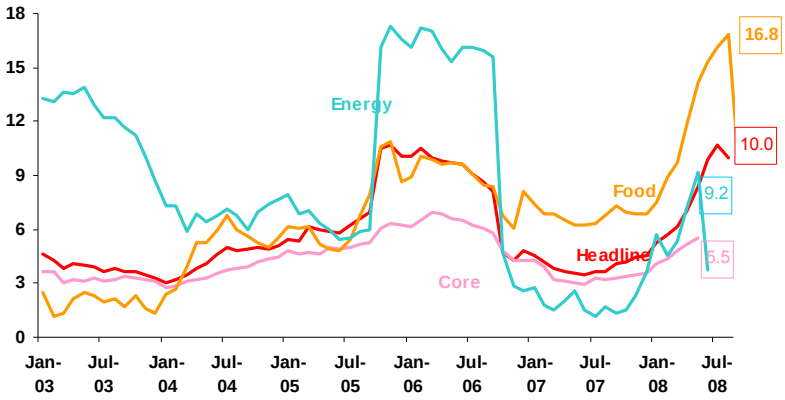
Panel A: Emerging East Asia[1]



Panel B: NIEs[1]



Panel C: ASEAN-4[1]



[1] Weighted by gross national income (atlas method, current $). Refer to price inflations as at August 2008, except core and energy subcomponents at end-May. But for Panel B, all price inflations are at end-August. (Indonesia's latest energy price is in May).

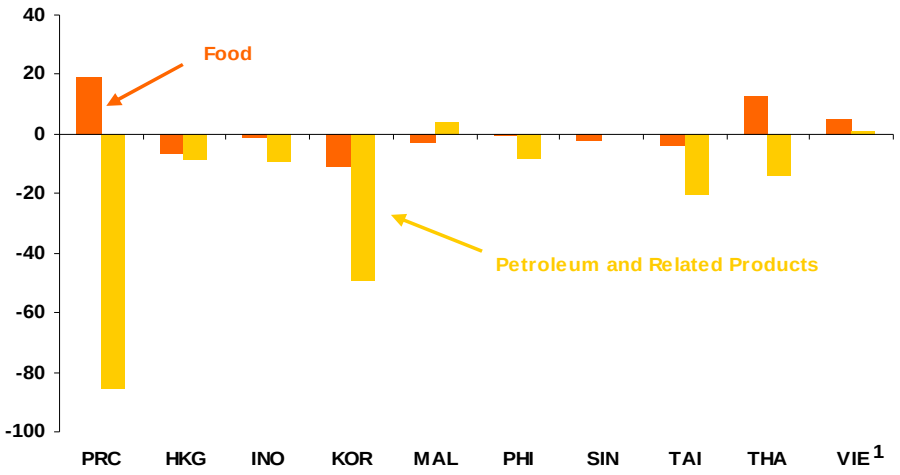
Sources: OREI staff calculations based on data from national sources.

Table 1: Food and Energy Weights in CPI Basket

	Food	Energy	Total
Brunei Darussalam	28.8	22.5	51.3
Cambodia	42.7	8.7	51.4
China, People's Rep of	33.6	13.0	46.6
Hong Kong,China	26.9	3.6	30.5
Indonesia	43.4	25.6	69.0
Korea, Rep of	14.0	17.0	31.0
Lao PDR	55.0	12.0	67.0
Malaysia	33.8	22.4	56.2
Myanmar	64.9	8.8	73.7
Philippines	46.6	2.4	49.0
Singapore	23.0	22.0	45.0
Taipei,China	26.1	7.0	33.1
Thailand	36.1	9.1	45.2
Viet Nam	42.7	10.1	52.8
Emerging East Asia	37.0	13.2	50.1
NIEs	22.5	12.4	34.9
ASEAN-4	40.0	14.9	54.9
Memo:			
US	14.9	5.1	20.0
EU	15.5	4.7	20.2

Sources: National statistics offices and central banks.

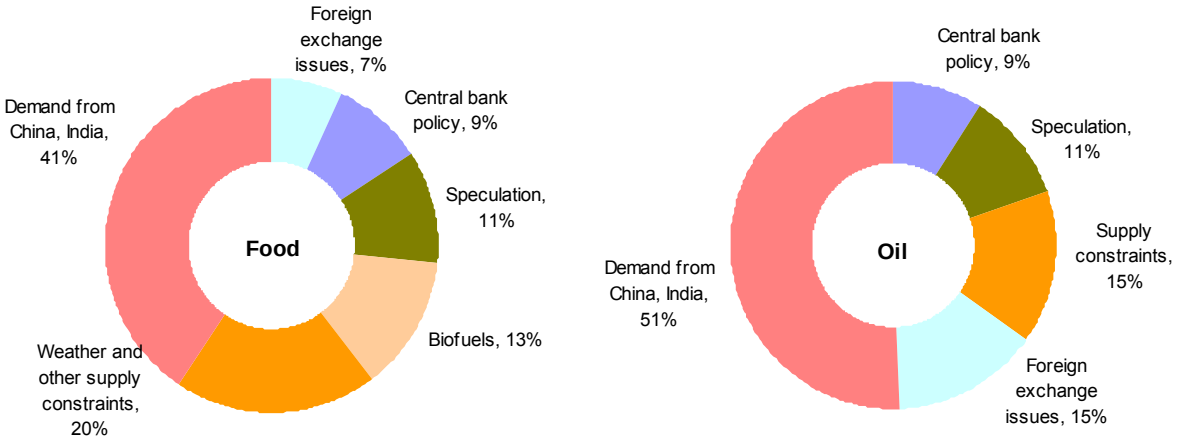
Figure 6: Net Food and Petroleum Exports, 2007 ($ billion)



[1] As of 2006.

Sources: CEIC database and UN COMTRADE for Viet Nam.

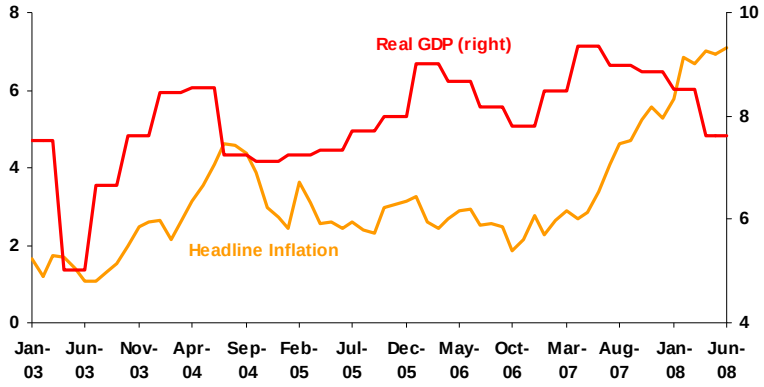
Figure 7: Drivers of Food and Oil Prices



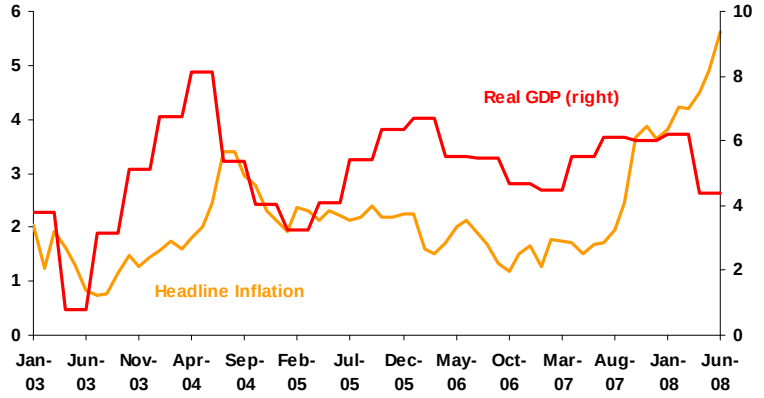
Source: The Wall Street Journal (Asia). page 17. May 9-11, 2008.

Figure 8: Headline Inflation and Real GDP
(y-o-y,%)

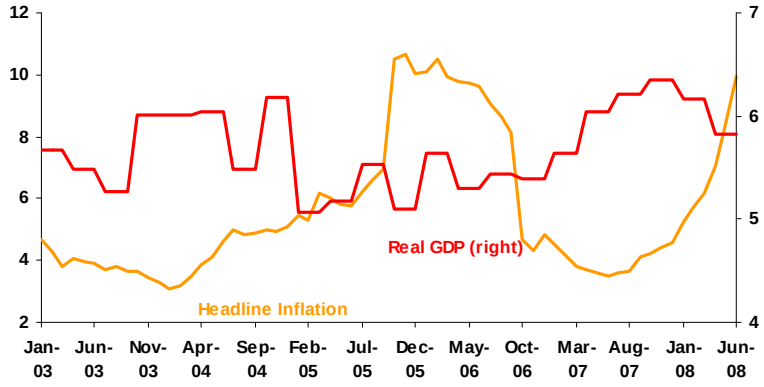
Panel A: Emerging East Asia[1]



Panel B: NIEs[1]



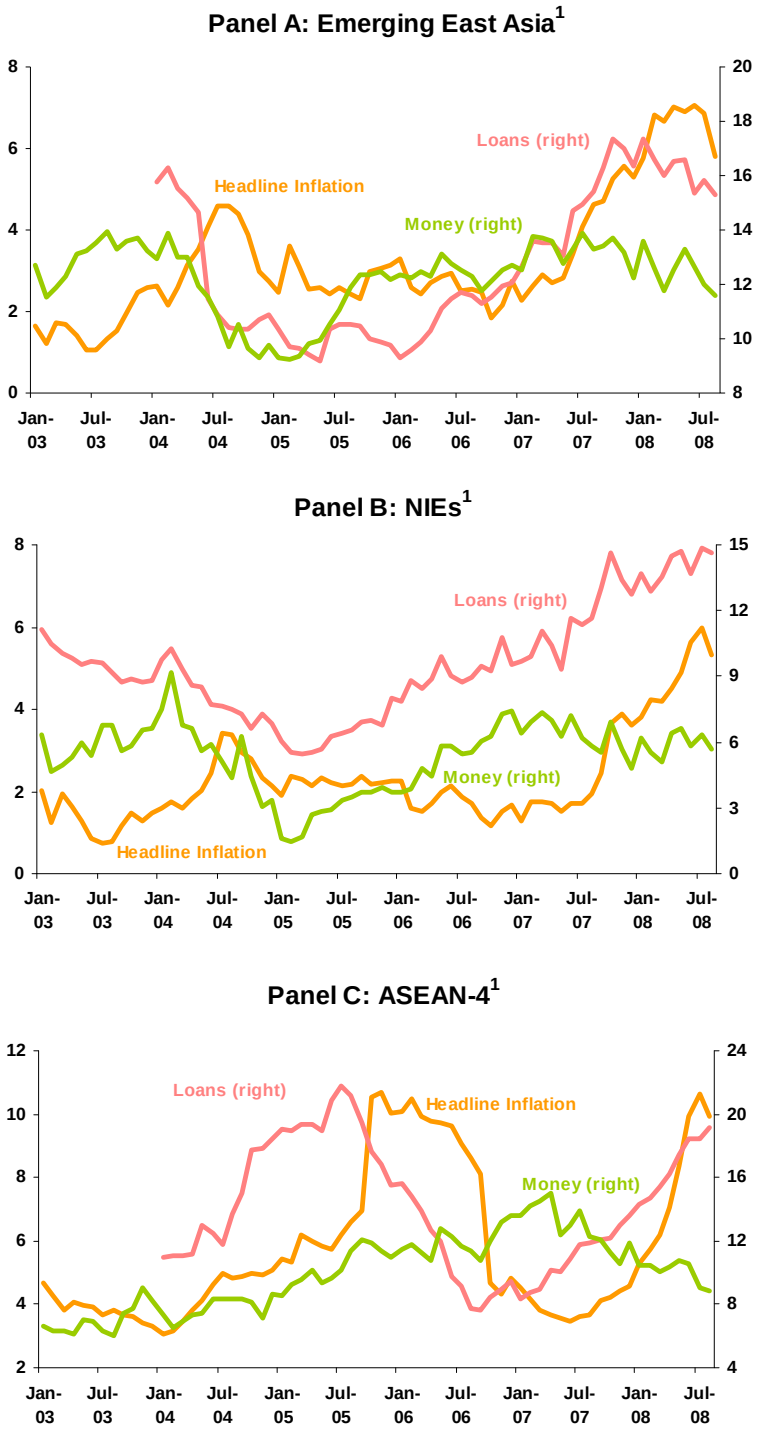
Panel C: ASEAN-4[1]



[1] Weighted by gross national income (atlas method, current $).

Source: OREI staff calculations based on data from national sources.

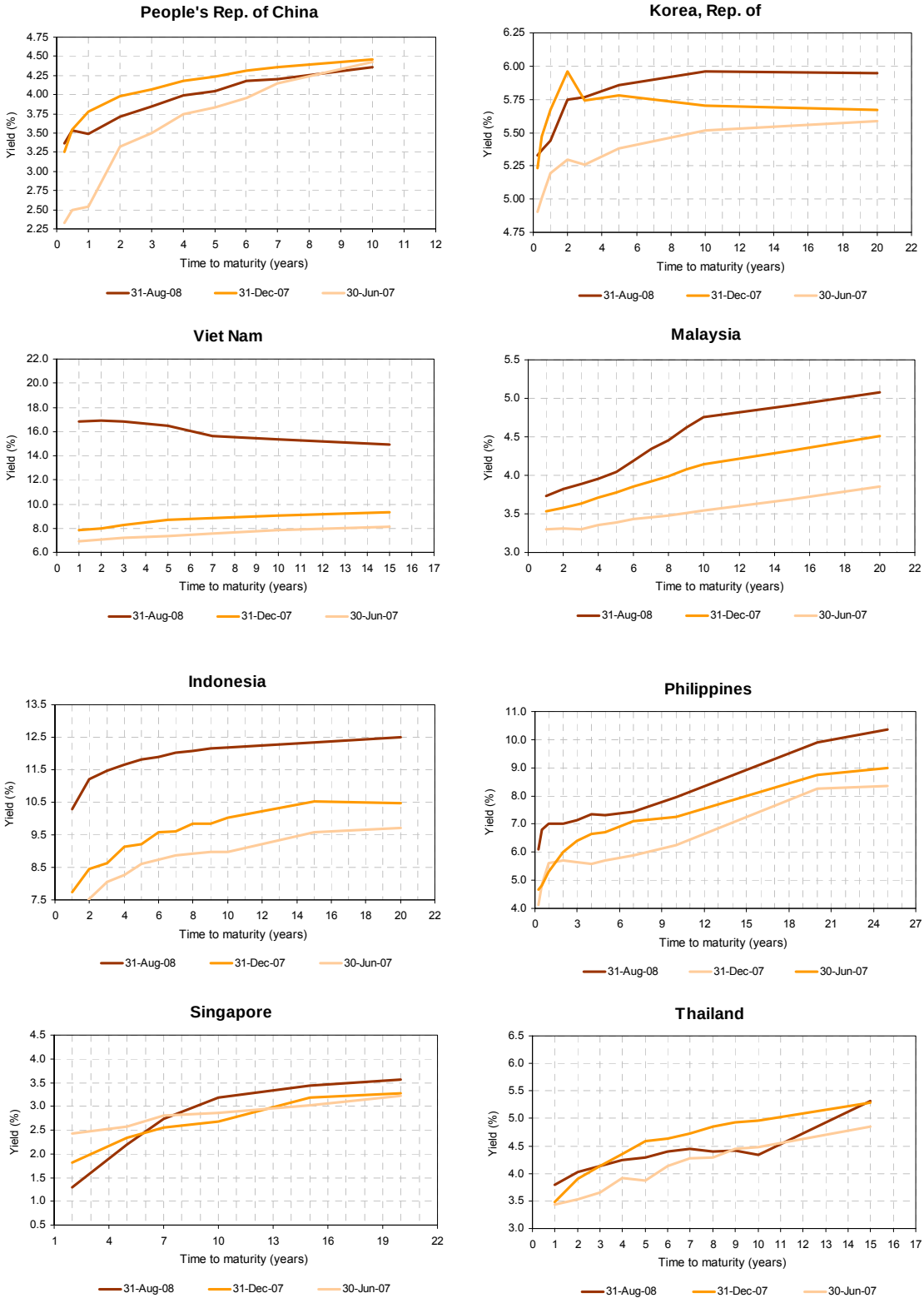
Figure 9: Headline Inflation, Money and Loan Growth (y-o-y,%)



[1]Weighted by gross national income (atlas method, current $).

Source: OREI staff calculations based on data from national sources.

Figure 10: Term Structure of Interest Rates



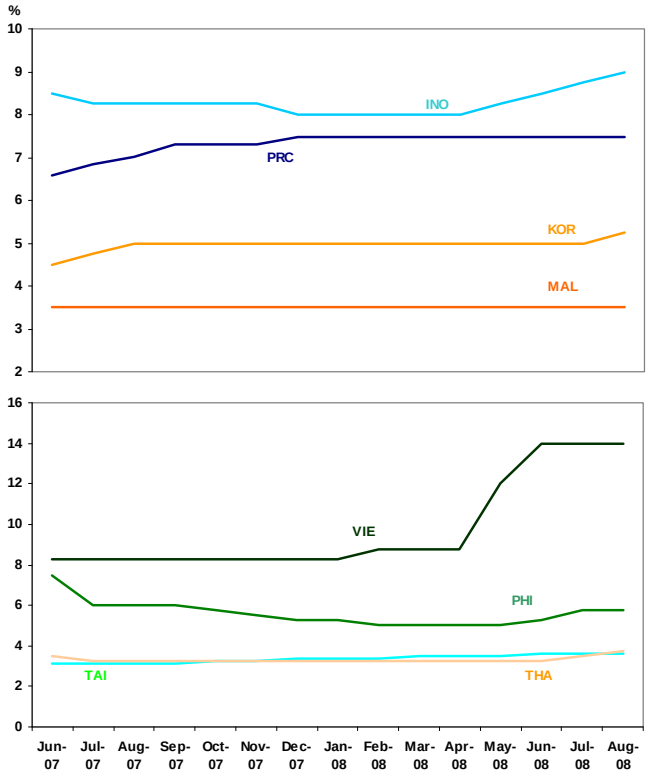
Source: Bloomberg.

Table 2: Recent Administrative and Fiscal Measures to Address Rising Inflation

Measures	CAM	PRC	INO	KOR	MAL	PHI	SIN	TAI	THA	VIE	Total
Reduce import duties		●	●	●		●		●			5
Increase supply using reserves	●	●	●	●					●		5
Build reserves/stockpiles	●				●	●	●		●	●	6
Increase imports/relax restrictions	●		●		●	●			●	●	6
Raise export duties		●	●								2
Export restrictions	●	●								●	3
Price controls/consumer subsidies	●	●	●	●	●	●		●	●	●	9
Minimum support prices		●				●					2
Minimum export prices										●	1
Assistance/subsidy to farmers		●			●	●					3
Promote self-sufficiency		●		●	●	●					4
Actions against/appeals to profiteers	●	●				●			●		4
Cash transfer		●			●		●				3
Food ration/stamp			●			●					2
Total	**6**	**10**	**6**	**4**	**6**	**9**	**2**	**2**	**5**	**5**	

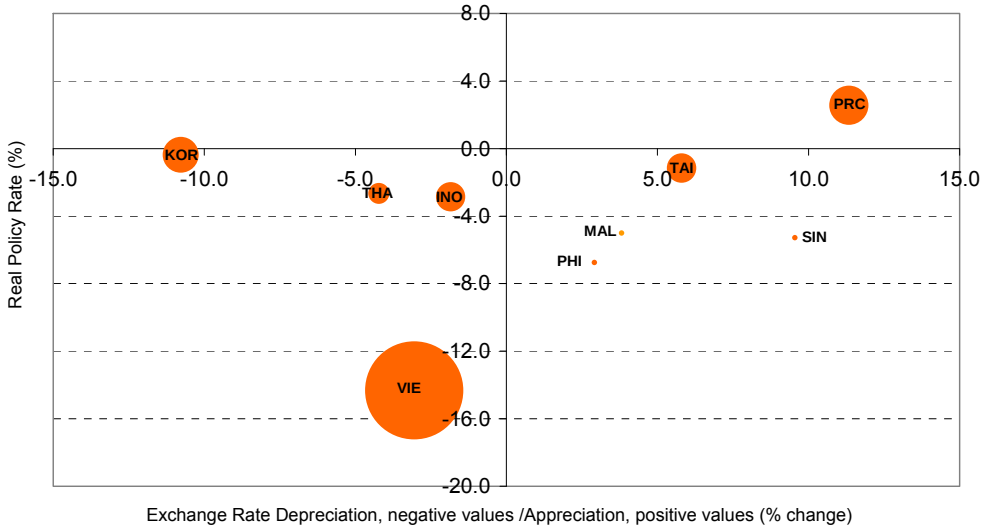
Sources: ADB. 2008. *Food Prices and Inflation in Developing Asia: Is Poverty Reduction Coming to an End*? Manila: ADB and various news articles.

Figure 11: Monetary Policy Rates



Sources: Bloomberg and national sources.

Figure 12: Current Monetary Conditions (end-June 07 to Aug. 08)



Sources: Author's calculations based on Bloomberg and national sources.

Table 3: Inflation Track Record and Inflation Expectations

	Inflation Targeter	Inflation Record (%)[1]	Inflation Expectations: Forecast for 2008[2]	
			ADO	Consensus
Brunei	×	1.9	-	-
Cambodia	×	4.6	25.0 [↑19.1]	-
China, People's Rep. of	×	3.0 [6.4]	7.0 [↑2.2]	6.8 [↑2.0]
Hong Kong,China	×	2.1	4.3 [↑2.3]	4.9 [↑2.9]
Indonesia	✓	50.4 [10.0]	10.2 [↑3.8]	10.5 [↑4.1]
Korea, Rep. of	✓	11.1 [3.2]	4.7 [↑2.2]	4.9 [↑2.4]
Lao, PDR	×	28.3	10.1 [↑5.6]	-
Malaysia	×	3.1	5.6 [↑3.6]	5.7 [↑3.7]
Philippines	✓	8.2 [4.8]	10.5 [↑7.7]	9.7 [↑6.9]
Singapore	×	3.1	6.5 [↑4.4]	6.3 [↑4.2]
Taipei,China	×	4.4	3.8 [↑2.0]	3.8 [↑2.0]
Thailand	✓	4.6 [2.5]	7.0 [↑4.7]	7.0 [↑4.7]
Viet Nam	×	4.7	25.0 [↑16.7]	24.0 [↑15.7]
Memo:[3]				
US	×	3.9 [2.6]		
UK	✓	5.4 [1.6]		
EU	✓	2.1 [2.9]		

[1] Refers to average annual inflation rate. Based on the year the central bank is established or the earliest available data from the IMF IFS, Datastream, CEIC and/or Bloomberg: for Brunei, 1981; Cambodia, 1996; PRC, 1995 [1987, earliest available data]; Hong Kong,China, 1993; Indonesia, 1953; Korea, 1954; Lao, 1995; Malaysia, 1959; Philippines, 1950; Singapore, 1971; Taipei,China, 1961; Thailand, 1954; and Viet Nam, 1997. For inflation targeters, the number in square bracket refers to the year when they formally adopted an inflation targeting framework: Indonesia, 2005; Korea, 1998; the Philippines, 2002; and Thailand, 2000.

[2] Square bracket refers to percentage point change from 2007's inflation rate. Consensus forecasts as at 9 September.

[3] For the US, data start from 1936, in square bracket from 1994, the year the Fed Reserve formally announced its policy stance. For the UK from 1949 (earliest available data from IMF IFS); square bracket from 1997, the year the Bank of England formally gained its monetary independence. European Central Bank from 1999 since the launch of the euro, square bracket from 1957, the year Bundesbank was established.

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About the paper

In this paper Hsiao Chink Tang argues that recent inflationary pressures were not caused by temporary supply problems alone: monetary policy has a key role to play even when the causes are multifaceted. The reluctance and/or tardiness of emerging East Asian central banks to raise interest rates amid rising inflation and inflation expectations were clearly a cause of concern that eroded the little credibility the central banks have. Without much credibility, inflation expectations cannot be well-anchored. Great efforts must therefore be made to ensure credibility is developed and enhanced.

Asian Development Bank
6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
www.adb.org
Publication Stock No.

Printed in the Philippines