Macroeconomics
for Emerging East Asia

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Abstracts

The economies of Emerging East Asia share salient features from a macroeconomic standpoint: (i) both internal balance, involving output growth at potential with low inflation, and external balance, involving sustainable foreign trade and capital flows, are important for macroeconomic stability; (ii) the exchange rate plays an important role in stabilization policy; and (iii) policy space is constrained by debt sustainability concerns and global capital flows. This text develops a framework for analyzing sources of instability and approaches to stabilization policy within this setting. Thirteen economies are covered: China; Hong Kong; Indonesia; Korea; Laos; Malaysia; Myanmar; the Philippines; Singapore; Taiwan; Thailand; and Vietnam.

Preface

The book is motivated by the need for a different approach to macroeconomics for Emerging East Asia than the one offered by standard US texts. The US is unique in printing the world's reserve currency, freeing it from concerns about currency valuation, international payments imbalances, or debt sustainability, all of which matter a great deal for Emerging East Asia. In the emerging market setting, the exchange rate is a key factor in stabilization policy. Failure to appreciate this has resulted in contention over "currency manipulation", most vociferously against China coming from the US. This text establishes a framework for viewing foreign exchange market intervention in an appropriate light.

1. Fitting Macroeconomics to Emerging East Asia

Macroeconomics is the study of movement in aggregate economic activity. The focus of this text is, in particular, on short-run fluctuations around long-run potential growth. Deviations from potential result in output gaps, either positive, involving overheating, or negative, involving underperformance. For the open economies of Emerging East Asia, shocks to foreign trade and capital flows are a major source of volatility. Stabilization policy aims to keep an economy growing on track with its potential.

This text begins by laying foundations in balance of payments and exchange rates, and in money and finance, tailored to the Emerging East Asia setting. It then presents theories of macroeconomic instability and the business cycle. Discussion of monetary and fiscal policy follows with attention to the coordinated pursuit of internal and external balance. As fitting the Emerging East Asia context, emphasis is on the role of the exchange rate and the constraints imposed on policy by global capital markets and debt sustainability strictures.

2. Taking the Measure of Emerging East Asia

The economies of Emerging East Asia differ greatly with respect to size, level of development, engagement in international trade and finance, and the roles of state versus market. Yet, broadly speaking, a common framework for macroeconomic analysis applies even as particulars differ. Notably, all economies of the region must contend with shocks by instituting policy mechanisms aimed at maintaining balance. The economic features described in this chapter have a bearing on the particular forms these mechanisms take.

3. Microeconomic Fundamentals

Microeconomics focuses on the mechanics of demand and supply and development of the argument that competitive markets achieve efficiency in the allocation of resources. The tools of microeconomics find application in macroeconomics for analyzing markets that pertain to the economy as a whole, specifically, the market for loanable funds in which the interest rate is determined and the market for foreign exchange in which the exchange rate is determined.

4. National Income & Product Accounts

The national income and product accounts yield key economic aggregates and detail their component parts. Gross domestic product (GDP), the principal measure of economic activity, is arrived at through three different approaches that sum elements along different dimensions as follows: the product approach based on sector of production, the broad divisions being agriculture, industry, and services; the expenditure approach defined over consumption, investment, government, and exports net of imports; and the income approach encompassing wages, interest, rents, and profits. The expenditures approach gives rise to a basic identity equating the gap between saving and domestic investment (S-I) to the trade balance (X-M). Comparison of the economies of Emerging East Asia by GDP component brings out the region's diversity. Historic data for Taiwan reveal systematic changes that occur in conjunction with economic development.

5. Balance of Payments Accounts

The balance of payments accounts capture money flows between residents of an economy and non-residents. Major components of the balance of payments are: the current account encompassing trade in goods and services, factor incomes, and cash transfers; the capital and financial account capturing the transfer of assets and liabilities; and the official settlement balance reflecting purchase and sale of foreign reserves by the central bank. In principle, the balance of payments must balance, meaning a surplus in one component of the accounts must be matched by a deficit elsewhere. In practice, gaps, which can be sizable, are ascribed to a fourth component of the accounts given as net errors and omissions. The record of recent decades shows Emerging East Asia running large balance of payments surpluses offset by substantial reserve accumulation by the region's central banks. China's balance of payments surpluses and reserve accumulation have been particularly enormous in absolute terms, but sudden reversals in central bank flows have also been sizable indicating a large buffer of reserves is warranted.

6. Money

Money is created by the banking system issuing liabilities against itself. Under a fiat money system, nothing of intrinsic value backs the money supply. Viability of the system depends on shared faith. Central banks issue liabilities in the form of currency and deposits held by commercial banks in exchange for acquiring assets in the form of domestic government securities, foreign securities, or loans to commercial banks. These central bank liabilities constitute the monetary base. Commercial banks issue liabilities in the form of demand deposits held by the public in exchange for making loans. Commercial banks are constrained in money creation by the need to hold reserves with the central bank at a required ratio relative to demand deposits. The central bank must manage growth in the monetary base to maintain economic balance: too slow keeps the economy from performing at its potential while too fast causes inflation to rear up. To keep the economy on an even course, the monetarist school, led by Milton Friedman, advocates steady growth in the money supply. A pattern of inflation falling with slowing money growth shows up for Emerging East Asia between the 1990s and the 2000s.

7. Finance

A financial system channels funds from net savers to net spenders. But it does more than that, for the pie need not be fixed in size. Through its power of credit creation, the financial system can fuel economic expansion. The process is prone to fragility, however, and overshoot can end in crisis. A financial system encompasses financial intermediaries, which issue claims against themselves in order to provide funds to users (e.g., banks creating deposit accounts to make loans), and financial markets, which facilitate the direct exchange of claims between suppliers and users of funds (e.g., stocks and bonds). A diversity of channels for financing undertakings allows for the management and dispersion of risk. Interest rates and asset prices are determined in financial markets, with movement in the opposite direction of one another. Variation among the economies of Emerging East Asia is nowhere more stark than in the realm of finance. Hong Kong is home to the highest ratio of financial assets to GDP in the world while in the least developed economies of the region banking systems are rudimentary and capital markets little more than an idea.

8. Exchange Rates

An exchange rate is the price of one currency in terms of another. The movement over time of a currency's value relative to a composite basket of currencies is given by an effective exchange rate index, in either real or nominal terms. Left entirely to market forces, exchange rates can be highly volatile. To manage exchange rate movement, central banks in Emerging East Asia intervene in foreign exchange markets to varying degrees. At one extreme, Hong Kong maintains a hard peg to the US dollar. At the other, exchange rate regimes classified by the International Monetary Fund as “floating”, but not “free floating”, are followed by Indonesia, Korea, Malaysia, the Philippines, and Thailand. Whether the regime is fixed or floating, mechanisms exist to maintain balance in international payments. The Indonesian case offers lessons in the challenges of exchange rate management. In the face of a balance of payments shock, such as a foreign capital inflow or outflow or a shift in export prices, the central bank "leans against the wind" to moderate appreciation or depreciation.

9. Models of Equilibrium and Disequilibrium

Macroeconomic models provide a framework for relating key aggregates. Classical and Keynesian models diverge as to how quickly prices and wages adjust to eliminate the twin excess supplies of a downturn – a glut in product markets and unemployed workers in labor markets. The aggregate demand / aggregate supply model is a model of equilibrium in the Classical spirit in which prices adjust to clear markets and the economy rebounds spontaneously from shocks to recover its potential growth path. In contrast, the income-expenditure model, based on the work of Keynes, depicts an economy that is prone to sustained sub-optimal performance. In this model, wages and prices fail to adjust to achieve full employment in any timely fashion, and aggregate demand thus falls short of inducing production at potential. Finally, the IS-LM (interest/saving-liquidity/money) model elaborates on the Keynesian framework to highlight the role of the interest rate in policy, and the Mundell-Fleming extension of the model brings in a foreign sector with a role for the exchange rate.

10. Business Cycles

The dominant paradigm for analysis of macroeconomic fluctuations takes full-employment equilibrium as the norm and attributes temporary and self-correcting deviations from this norm to exogenous shocks. Notions of the natural rate of unemployment and rational expectations for inflation rest on an equilibrium premise, as do contemporary dynamic stochastic general equilibrium (DSGE) models. There is, however, another way of thinking about business cycles to be found in the historical literature. This alternative paradigm takes the movement of an economy through business cycles as itself the norm and views endogenous forces as driving the process. At the heart of the dynamic is credit behavior in a story that goes back to Bagehot (1874) and found renewal with Minsky (1986). In the boom phase of the cycle, credit expands, business is good, risk is rewarded, and asset values are bid up. But the process overshoots, and collapse ensues, to be followed by a cleansing of excess as businesses fail and the financial system retrenches. Bagehot himself proposed a synthesis of the two paradigms, and this approach works well to interpret the ups and downs of the Philippine economy historically.

11. Monetary Policy

Monetary policy aims at stabilizing an economy through central bank management of the money supply to influence aggregate demand. Constraints on the policy framework are imposed by the Trilemma which holds that policymakers cannot have all three of: open capital markets; an independent monetary policy; and a pegged exchange rate. Exercise of options varies within the Emerging East Asia region. Hong Kong with its globally integrated financial market pegs its exchange rate to the US dollar giving up discretion over monetary policy. China with its state dominated economy imposes controls on foreign capital flows allowing separation of monetary and exchange rate policies. Mostly though, the region's capital markets are open enough that the interest rate and the exchange rate intertwine as instruments of policy. Against external shock, central banks lean against currency volatility, with monetary policy following along. Sterilization of foreign exchange market intervention operates within limited space lest speculative capital flows bet against the central bank. Singapore makes for an interesting case study of exchange rate based monetary policy.

12. Fiscal Policy

Fiscal policy aims at stabilizing an economy through government management of spending and taxes to influence aggregate demand. Fiscal policy works through both automatic stabilizers, based on countercyclical responses of spending and taxation to income fluctuations, and active management, particularly in response to severe negative shocks. Fiscal stimulus is most effective under conditions of either a fixed exchange rate combined with high capital mobility or a floating exchange rate combined with low capital mobility. Use of activist fiscal policy is limited by cumbersome decision-making processes, the countervailing effects of government borrowing on interest and exchange rates, and debt sustainability constraints. Space to run a primary fiscal deficit while holding the debt ratio constant is greater the lower the interest rate and the higher the GDP growth rate. Debt-to-GDP ratios vary greatly across Emerging East Asia, and with that so does capacity to respond to crisis. After running deficits that exceeded the sustainbility threshold for some years, Vietnam managed to put government finances on a sounder footing by the late 2010s.

13. Policy for Internal & External Balance

Monetary and fiscal policy work in complementary fashion to address internal and external imbalances. The Swan diagram captures the interaction. The model defines four “zones of economic discomfort” based on the four possible combinations of internal overheating versus underperformance relative to GDP growth potential and external overshooting versus undershooting of a current account target. Based on an economy’s position within the Swan diagram, recommendations for expansionary versus contractionary monetary and fiscal policy emerge. In the Malaysian case for the late 2010s, the model yields a recommendation for contractionary monetary policy and expansionary fiscal policy. However, Malaysia at the time did not have the fiscal space to implement such a program. Taking a broader perspective, the conclusion is that Malaysia should address its imbalances as structural in nature rather than relying on countercyclical policy.

14. Macroprudential Policy

Macroprudential policy involves regulation and supervision of financial institutions to safeguard stability in the financial system as a whole. The system can become vulnerable to loss contagion even when institutions on an individual basis maintain strong balance sheets. Examples of macroprudential policy instruments include capital and liquidity requirements; limits on credit and leverage; regulation pertaining to borrowers, for example loan-to-value ratios; and special requirements for systemically important financial institutions. Systemic risk tends to build in boom times and subside in busts. These fluctuations tend to be amplified in the Emerging East Asia setting by global capital flows. Macroprudential policy aims at moderating the fluctuations. Analysis is complicated by the diversity of instruments available and the complexity of the regulation involved. Korea's relatively long history of experience offers opportunity for study.

15. Crises

Crises typically originate in financial overshoot as mounting debt becomes unsustainable. Despite centuries of catastrophic experience with this phenomenon, policymakers have not figured out how to consistently avoid it. A strong human tendency to rationalize excess seems to impede recognition of a problem until it's too late, in a "this time is different" mentality. Crisis situations put monetary and fiscal policy to their ultimate test. The Asian Financial crisis rolled across the region in 1997. As the epicenter, Thailand offers a window into the incubation and eruption of a financial crisis and lessons learned about policy response. From 2020, a crisis of a different sort has unfolded in the from of a shock to the the real economy from a pandemic. The policy response to this crisis has differed greatly among Emerging East Asian economies with constraints on policy bearing on options.

16. Epilog

Macroeconomic stabilization in emerging economies calls for managing both internal and external balance within a policy space constrained by global capital flows and debt sustainability pressures. Emerging East Asia has crafted an approach to meeting this challenge that involves the exchange rate as policy instrument. But while the economics of the system have proven effective, the politics can run afoul of US strictures on "currency manipulation". This is a source of ongoing tension. Viewing East Asian exchange rate policy through the framework of this text, the macroeconomic motivation for the policy behavior is clear. And motivation is determinative for establishing "currency manipulation" under IMF rules. Advantaging exports through a depressed currency is a side effect of, not the motivation for, accumulating foreign reserves to back exchange rate stabilization. A broad pattern of leaning against currency volatility through both buying and selling of foreign exchange is evident in Emerging East Asia. Countries elsewhere would do well to learn from this model.