Introduction and Overview

This volume is a collection of papers that I have written over the last two decades during part of my tenure at the International Monetary Fund (IMF), the South East Asian Central Banks (SEACEN) Research and Training Centre, and Singapore Management University. The overarching macroeconomic objective of economic policy is to achieve the maximum level of a stable, noninflationary growth rate of full employment GDP. Economic policies, of course, have effects on other variables besides economic growth, that is, among others, on inflation, balance of payments, and income distribution. These important variables are related to the growth objective. For instance, monetary policy aims at achieving a low and stable rate of inflation. Why? Because such a policy is conducive to a sustained high rate of long-term investment, and thus, economic growth. Trade and financial policies aim at a sustainable balance of payments. Why? Because opening up the domestic economy to trade and capital flows contributes to high growth rates of exports and output. Fiscal and sector-specific policies aim at a less skewed distribution of income and wealth. Why? With access to more income and wealth-producing assets, workers become more productive by spending more on education and acquiring more skills, and thus, contribute to higher growth.

Relying on formal growth models and the accumulated experience working in the IMF for 30 years, I have analyzed in this book the links between macroeconomic policies on one hand, and noninflationary economic growth and the distribution of income and wealth on the other. Economic growth is taken to mean the growth of potential or capacity GDP, that is, full employment GDP. Macroeconomic and financial policies include fiscal, monetary, banking, trade, and external debt management measures. Trade policies include foreign trade liberalization and export orientation.

Macroeconomic stabilization and effective oversight of banks and other intermediaries are the focus of Chapter 1, which was written in 1989 and published in 1990, long before the financial and banking crises of the 1990s. It discusses strategies for financial reforms to maximize the benefits of financial liberalization and integration with global markets. A review of the period before 1989 reveals that economic stability, effective financial supervision, and an appropriate sequencing of stabilization, financial regulations, and interest rate policies are identified as common characteristics of the relatively successful experiences in financial sector liberalization and integration. Major theoretical developments in the early 1980s help to explain why interest rates in free markets may fall short of market-clearing levels, or may rise to risky levels, with adverse consequences for financial institutions and the economy at large. To prevent such outcomes, economic stabilization and strong supervision of financial institutions should generally precede complete removal of controls on capital flows and interest rates.

Chapter 2, written a year after the 1997 Asian financial crisis, draws from the first chapter's analysis and policy recommendations, which remain valid today as they were in 1990 and 1997. This chapter looks at net international private capital flows prior to the crisis, analyzes their macroeconomic effects, and describes the policies employed to manage such flows, including market-based approaches and capital controls. It then elaborates on a proposal to reap the benefits of open capital markets while simultaneously minimizing the risks of future financial crises. Major policies include strengthening financial supervision or adopting a public disclosure framework for financial institutions to enhance market discipline.

Chapter 3 is concerned with optimal savings and external debt management policies consistent with maximum social welfare. A hitherto unpublished new Appendix 3.C is added to extend the theoretical framework to include intertemporal utility maximization in an optimal control setup. Raising fiscal savings and implementing strong incentives for private savings are needed for maximum growth and welfare. Reliance on foreign borrowing should be avoided, especially against the backdrop of high interest rates and risk spreads. Econometric estimates of the elasticity of intertemporal substitution imply optimal, dynamically efficient domestic saving rates in the range of 18 percent $\sim$ 22 percent of GDP, which are feasible targets for most governments in Asia and elsewhere. The optimal net foreign debt to GDP ratio is in the range of 12 percent $\sim$ 22 percent of GDP. Given a ratio of gross foreign assets to GDP in the range of

25 percent $\sim$ 30 percent,[1] the (Ramsey) optimal gross foreign debt is in the range of 37 percent $\sim$ 52 percent of GDP.

Chapter 4 examines the links between exports and economic development. There is merit in adopting an export-oriented strategy of economic development owing to its significant positive consequences for advances in technology and enhancement of labor productivity. Such a strategy should be supported by a competitive, market-determined real exchange rate combined with low, nondiscriminatory tariff structure and the removal of nontariff barriers.

Chapter 5 derives optimal fiscal policies to increase saving and investment that raise the capital/labor ratio and thus have magnified growth effects because of induced learning by doing. Higher levels of government expenditures on education and health enhance the learning process and, therefore, accelerate the adjustment toward the maximum steady-state growth path. However, it is imperative that fiscal deficits be brought under control to minimize their detrimental effects on economic growth. Underpinning such growth-promoting government policies is a model developed in this chapter, which postulates that learning through experience raises labor productivity with three major consequences. First, the steady-state growth rate of output becomes endogenous and is influenced by government policies. Second, the speed of adjustment to steady-state growth increases, and enhanced learning further reduces adjustment time. Third, both steady-state growth and the optimal net rate of return to capital are higher than the sum of the exogenous rates of technical change and population growth. Simulation results confirm the model's faster speed of adjustment, and regression analysis finds that a large part of the divergent growth patterns across countries is related to the extent of economic openness, the depth of human development, and the quality of fiscal policies. When extended to an optimal control framework described in a previously unpublished Appendix 5.B, the model shows that, for a given degree of the elasticity of intertemporal substitution, the presence of learning by doing not only leads to a higher long-run growth rate of per capita output, but also to a faster speed of adjustment to the steady state. Moreover, an increase in the degree of learning by doing contributes to an even faster adjustment speed. The intuitive reason for the latter result is that the learning by doing component

[1]The average ratio for the Philippines during 1970–2004 is 27 percent (Lane and Milesi-Ferretti, 2006, References, Chapter 3 of the current volume).

of effective labor growth (natural rate) adjusts to any discrepancy between it and capital growth (warranted rate). The standard growth model focuses *exclusively* on the adjustment of the warranted rate. The extended model relies on *both* the adjustments of the warranted and natural rates of growth, so that the speed of adjustment to the steady state (defined by equality between the two rates) is faster. Simulation results also show that, holding the learning coefficient constant, adjustment to the steady state is faster as the elasticity of intertemporal substitution increases. When the endogenous component of technical change adds at least two percentage points to the steady-state growth rate of output, and depending on the elasticity of intertemporal substitution, it would take 13 $\sim$ 18 years for the standard model with no learning by doing to reach 90 percent of the time required to reach its steady-state GDP growth path. This period of adjustment is reduced to 10 $\sim$ 12 years for the model with learning by doing.[2]

Chapter 6 analyzes the role of social and political factors in economic growth and the distribution of income and wealth. Applying a two-class growth model to the Philippines, the analysis concludes that minimizing the rate of social extraction[3] and improving the distribution of income and wealth should be explicit objectives of macroeconomic policy, owing to their importance in achieving broad-based and rapid increases in the *level* and *growth* rate of per capita GDP. The adoption of a progressive or at least neutral fiscal policy is an evolutionary way to correct the initial distribution of wealth. Combined with certain sector-cum-institutional policies described in this chapter, such a fiscal policy lowers the social rate of extraction, raises labor productivity, and leads to rapid long-run economic growth.

Chapter 7, previously unpublished, addresses the issue of the role of monetary policy in the growth process. Much like in the advanced countries, monetary policy should aim at a low and stable rate of inflation in the developing countries. While creating temporary unemployment, a disinflation program in the long run leads to permanently high levels and growth rates of real GDP and potential output. On the other hand, while an expansionary monetary policy may temporarily keep the economy at

[2]That is, 10 years for the high substitution elasticity (0.91), 11 years for the medium substitution elasticity (0.67), and 12 years for the low substitution elasticity (0.53).
[3]Defined as the proportion of labor's marginal product *not* paid out as wages but instead appropriated by capital.

full employment in the short run, such a policy eventually results in higher inflationary expectations and in permanent reductions in levels and growth rates of output.

Each chapter ends with a summing up and concluding section. All (except Chapter 4) have appendices, many of which are technical.