5. Growth

Growth is the single most important metric of economic performance. Without stable economic growth, social life becomes unstable. This instability affects not just firms and workers but also the political stability of the state itself. Because of this, dating back to the Physiocrats and Adam Smith, the primary concern of the economics discipline has been to explore what creates sustainable economic growth.

Yet again this is another area where orthodox and heterodox economists differ significantly. Orthodox economists believe that capitalism produces sustainable economic growth when left to its own devices. The periods of stagnation are not caused by the system itself, but by "exogenous shocks" that periodically lead to major shifts in supply or demand. However, in the long run the economy will adjust and create a new equilibrium with sustainable growth rates despite the negative short run impact of these exogenous shocks.

This is usually explained through the Solow growth model. In the Solow model economic growth is determined by the relative weight and price of factors of production: labor and capital. If the price of labor increases due to an exogenous shock, then the economy will shift towards higher ratio of investments on capital (more capital intensive). If the price of capital increases for the same reason, then the economy will shift towards a higher ratio of investments in labor (more labor intensive). Hence the

endogenous adjustments will help recover the growth rates to their preshock levels.

Keynesian and heterodox economists believe that the economy will never produce sustainable growth left to its own devices. At any given point there will be idle labor or idle capital in a capitalist economy. There are a variety of different heterodox theories that aim to explain why the economy fails to produce sustainable growth. We have already mentioned one model, that is Shaikh's model based on profitability, which explains the shortage of investments and capacity underutilization through lower rates of profitability in the economy.

Shaikh's model is very similar to the Harrodian model described in the textbook. The Harrodian model suggests that the economy will produce cycles based on rates of profitability and the share of profits that are saved. This is the same variable we called the throughput coefficient in the previous section of notes: $s_{\pi}\pi$. If the investment share of income is lower than the throughput coefficient then economic growth be negative. This is because in this case not all the profits that are saved are being reinvested. On the other hand, if the investment share of income is larger than the throughput coefficient, then the economy will experience growth.

Harrodian cycle suggests that the economy will produce cyclical behavior based on the level of profitability and the capitalist's propensity to save. The cycles of profitability are longer term and informed by the degree of capital investments, while there will be shorter term cycles based on the propensity to save.

The second model is the Kaleckian growth model. Kalecki's contribution is the α that represents the "animal spirits" of the investors. Although capitalists spend quite a bit of time trying to figure out what type of investments are most profitable, their behavior is not always driven by rational considerations. Oftentimes, capitalists rush into certain sectors that they deem extremely profitable, however by the time they enter these sectors they might fail to meet their profit targets. Hence what some others call "business confidence" or "expectations" are an important factor that drive the level of investments. For Kalecki, so long as the animal spirits of investors are running high, and aggregate profits and output are growing steadily, there will be steady levels of high growth. Hence in this case the downturns are caused by changes in business confidence, that may or may not be informed by profitability.

The third model is the Kaldorian model. Kaldorian model argues that growth is determined entirely by the rate of growth of exports and the propensity for imports. Higher level of net exports (that is exports – imports) allow for increased capacity for investment in the economy. As a result of this, so long as the rate of exports grow faster than the rate of imports, the economy will deliver positive growth rates.

The main factor that would provide higher levels of import however is aggregate productivity. Unless the economy is more productive in comparison to other economies, it will not be feasible to have positive net exports. This is because if other countries are more productive, they will be able to sell their goods and services for relatively lower prices which will allow them to export more than they import. One implication of this model is that if a country has high productivity and as a result high level of net exports, they will continue to do so unless other countries catch up to their levels of productivity. This implicitly explains the export advantage of advanced capitalists' economies. The high quantity of imports the developing economies rely on both further empowers the advanced countries and weakens their own industries.

To summarize we have explored four different theories. First is the Solow model that argues the economy will produce sustainable growth even in the absence of economic intervention. This is because the shifts within relative factors of production will guarantee a stable equilibrium in the long run. The heterodox theories we described assume that the growth rates are not going to be inherently stable, they will be informed by certain factors in the economy. The Harrodian model suggests that aggregate profitability and capitalists' propensity to save will create two different cyclical trends in the economy. Kaleckian model adds that "the animal spirits" will also drive economic fluctuations. The Kaleckian fluctuations still presume a

relationship to profits and the propensity to save. Hence the Harrodian and Kaleckian theories together imply there will be three cyclical trends informed by profitability, propensity to save and expectations/animal spirits. Finally, the Kaldorian model argues that the primary driver of economic growth is net exports and net exports are informed by the productivity levels in the economy. The broadest implication of the Kaldorian model has to do with how the inequalities in productivity between the advanced and developing economies will reinforce themselves through the countries' trade balances. The poorer countries will be relying on exports which will maintain their industries weaker in comparison to more productive and richer countries who will further grow due to their ability to export.

Table 10.2 A summary of the main features of Keynesian growth theory

	Key equation	Main 'driver' of growth	Nature of growth outcomes
Harrodian model	Equation (10.5) $\Delta Y = \left(\frac{\beta}{\epsilon_n \pi} - 1\right) Y_{-1}$	Investment	Unsteady (growth will vary from period to period, possibly producing cycles)
Kaleckian model	Equation (10.8) $\Delta Y = \frac{\Delta \alpha}{(s_{\pi} - \gamma)\pi - \beta}$	Investment	Steady (constant rate of growth)
Kaldorian model	Equation (10.13) $\Delta Y = \frac{\Delta X}{m}$	Exports	Steady (constant rate of growth)