



Understanding Business Cycles with different economic theories

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Abstract

This Paper gives a quick understanding of the business cycles and the major factors that affect the business cycles. This paper also discusses the different economic theories that is relating to the changes in business cycles. In the sections that follow, we describe credit cycles, introduce several theories of business cycles, and explain how different economic schools of thought interpret the business cycle and their recommendations with respect to it. We also discuss variables that demonstrate predictable relationships with the economy, focusing on those whose movements have value in predicting the future course of the economy. We then proceed to explain the measures and features of unemployment and inflation.

Keywords

Business Cycles, Economic Theories, Credit Cycles

Review of Literature

The stylized facts of business cycles across nations are more varied than those of the comparatively consistent industrialised economies, and cycles are typically shorter. Although supply-side models are typically better at explaining output fluctuations, a "one size fits all" approach to policy formulation is unsuitable. Our findings further highlight how crucial it is to comprehend business regularities as a first step in implementing suitable stabilisation policies and macroeconomic management in developing nations.

- John Rand, Fin Trap

To estimate common and nation-specific components in the main macroeconomic aggregates (output, consumption, and investment) of the G-7 countries, we use a Bayesian dynamic latent factor model. Then, for each observable aggregate, we quantify the relative contributions of the common and country components to explain comovement over three separate time periods

- M. Ahyan Khose

The characteristics of economic cycle fluctuations in Latin American economies are examined in this essay. We define the type of aggregate shocks that affected these economies in the manner of Aguiar and Gopinath (2007). We discover conflicting evidence for a particular sample of nations, including Argentina, Brazil, Chile, Colombia, Peru, Mexico, and Venezuela. On the one hand, the permanent component is significant for some of these nations. In Colombia and Venezuela, permanent shocks account for about 89

percent of the total productivity shock, and roughly 40 to 45 percent in Brazil and Peru. On the other hand, only extremely persistent transitory shocks are present in Argentina, Chile, and Mexico.

- Manuel Toledo

This chapter outlines the contributions of a specific branch of the open economy macroeconomics literature and covers the key elements of global trade and business cycles. Due to the nonstationarity of much macroeconomic time series, the data must be modified to compute the moments. The Hodrick and Prescott-recommended linear filter is a frequently employed transformation. The following are some of this filter's crucial characteristics: (1) Any time series with an integrated order of four or less will be rendered stationary by the filter, and (2) when applied to quarterly data, the filter behaves reasonably as a high-pass filter that passes cycles with an eight-year or lower frequency using the standard value of $\lambda = 1600$ for the smoothing parameter.

- Marianne Baxter

How well do we comprehend growth and business cycles? The stochastic neoclassical growth theory, sometimes known as the real business cycle theory, offers one standard response: growth derives from productivity increasing steadily, but business cycles are caused by fluctuations in productivity around this trend. In this study, we look at how well a genuine business cycle model fits the relevant data. Given the model's simplicity, the fit at business cycle frequencies is quite convincing. The model, however, doesn't appear to be much more accurate at simulating the data than a "basic" model that merely rescales TFP variations. Furthermore, when filtering is not done, the fit becomes less convincing. It is difficult to develop more accurate quantitative theories that solve these shortcomings.

- Harald Uhlig

This study conducts a contemporary version of the test suggested and run by Adelman & Adelman (1959). We test if we can discriminate between the economic series produced by a real economy and the comparable synthetic series produced by a stochastically perturbed economic model using the techniques introduced by Burns and Mitchell (1946). The model matched the Klein-Goldberger equations in the instance of the Adelman's. In our situation, the model resembles a straightforward real business cycle model. The findings show a reasonably high degree of similarity in important economic aggregates between the business cycle features discovered in our simulated economy and those found in actual data.

- Rober J King, Charles I Plosser

In the aftermath of Keynes', The General Theory and the midst of the Great Depression, fifty years ago, the argument over the cause and spread of economic fluctuations raged with the same ferocity as it does now. There are two schools of thinking both now and then. The classical school places a strong emphasis on the efficiency of unrestricted markets, the optimization of private economic actors, and the adjustment of relative prices to balance supply and demand. According to the Keynesian school, comprehending economic fluctuations necessitates not only understanding the intricate workings of general equilibrium but also being aware of the prospect of widespread market failure.

- N.G. Mankiw

Economic experts have argued over the "causes" of business cycles for a very long time. Only a small portion of this research's findings closely match business cycle traits as determined by NBER-style dating techniques. After summarising information on the characteristics of business cycles for a wide range of nations, the article demonstrates how an incredibly straightforward statistical model of output growth—namely, that it is uncorrelated from month to month or quarter to quarter—produces business cycles that are similar to those observed in practice. A conventional definition of a recession is two consecutive quarters of negative growth, and this straightforward statistical model's simulations of data as well as some analytical efforts are used in the demonstration.

- Adrian Pagan

In this essay, I examine unresolved business cycle research difficulties as well as the contribution genuine business cycle models have made to our knowledge of economic variations.

- Sergio Robelo

the model of the, the model of the model of the the the model of the model of the model of the model. t a.t. the hand a. in a. The dynamic behaviour of unemployment appears to change during the course of the business cycle, with the unemployment rate rising more quickly than it is falling, as shown by a straightforward nonlinear alternative that is proposed. Additionally, many economic downturns, though

not all, are followed by a sharp shift in the dynamic behaviour of short-term interest rates. It is proposed that the most straightforward way to explain these nonlinearities is as the outcome of short-term failures in the credit and employment markets and that comprehending these short-term failures is the key to comprehending the structure of the economic cycle.

- James D. Hamilton

Introduction

A typical economy's output of goods and services fluctuates around its longer-term path. We now turn our attention to those recurring, cyclical fluctuations in economic output. Some of the factors that influence short-term changes in the economy—such as changes in population, technology, and capital—are the same as those that affect long-term sustainable economic growth. But forces that cause shifts in aggregate demand and aggregate supply curves—such as expectations, political developments, natural disasters, and fiscal and monetary policy decisions—influence economies, particularly in the short run.

We first describe a typical business cycle and its phases. While each cycle is different, analysts and investors need to be familiar with the typical cycle phases and what they mean for the expectations and decisions of businesses and households that influence the performance of sectors and companies. These behaviours also impact financial conditions and risk appetite, thus impacting the setting of expectations and choices of portfolio exposures to different investment sectors or styles.

Methodology

The business cycle is characterized by fluctuations in economic activity. Real Gross Domestic Product (GDP) and the rate of unemployment are the key variables used to determine the current phase of the cycle.

The Business Cycle has 4 Phases **Expansion** (real GDP is increasing), **Peak** (real GDP stops increasing and starts decreasing), **Contraction or Recession** (real GDP is decreasing), and **Trough** (real GDP stops decreasing and begins increasing).

An expansion features growth in most sectors of the economy, with increasing employment, consumer spending, and business investments. As an expansion approaches its peak, the rate of increase in spending, investment, and unemployment is slow but remains positive, while inflation accelerates.

A contraction or recession is associated with declines in most sectors, with inflation typically decreasing. When the contraction reaches a trough and the economy begins a new expansion or recovery, economic growth becomes positive again and inflation is typically moderate, but employment growth may start to increase until the expansion has taken hold convincingly.

A common thumb rule is to consider two consecutive quarters of growth in a real GDP as the beginning of an expansion and two consecutive quarters of declining real GDP as indicating the beginning of a contraction.

A key aspect of business cycles is that they recur, but not at regular intervals. Past business cycles have been as short as a year or longer than a decade.

The idea of business cycles applies to economics which consists mainly of businesses. For economies that are mostly subsistence agriculture or dominated by state planning, fluctuations in the activity are not really "business cycles".

Given how resource use, consumer and business activity, housing sector activity, and external trade sector activity vary as an economy moves through the business cycle, we should understand the following in brief.

Business activity and Resource use fluctuations

Inventories are important business cycle indicators. Firms try to keep enough inventory on hand to meet sales demand but do not want to keep too much of their capital tied up in inventory. As a result, the ratio of inventory to sales in many industries trends towards a normal level in times of steady economic growth.

When an expansion is approaching its peak, sales growth begins to slow, and unsold inventories accumulate. This can be seen in an increase in the **story-sales ratio** above its normal level. Firms respond to an unplanned increase in inventory by reducing production, which is one of the causes of the subsequent contraction in the economy. An increase in inventories is counted in the GDP statistics as economic output, whether the output is planned or unplanned.

The opposite occurs when contraction reaches its trough. Having reduced their production levels to adjust for lower sales demand, firms find their inventories becoming depleted more quickly once sales growth begins to accelerate. This causes the **inventory-sales ratio** to decrease below its normal level.

One of the ways firms react to fluctuations in business activity is by adjusting their utilization of labour and physical capital. Adding and subtracting workers in lockstep with changes in economic growth would be costly for firms, in terms of both direct expenses and the damage it would do to employee morale and loyalty. Instead, firms typically begin by changing how they utilize their current workers, producing less or more output per hour or adjusting the hours they work by adding or removing overtime. During contraction, however, firms will not sell plant and equipment outright. They can reduce their physical capacity by spending less on maintenance or by delaying the replacement of equipment that is near the end of its useful life.

Consumer Sector Activity

Consumer spending, the largest component of GDP, depends on the level of consumers' current incomes and their expectations about their future incomes. As a result, consumer spending increases during expansions and decreases during contractions.

Consumer spending in some sectors is more sensitive to business cycle phases than spending in other sectors. Spending on durable goods is highly cyclical because they are often higher-value purchases. During contraction consumers often postpone durable goods purchases until they are more confident about their employment status and prospects for income growth.

Consumer spending on services is also positively correlated with business cycle phases, but not to the same extent as durable goods spending. Services include spending that is more discretionary, such as for lodging or food away from home, but also includes spending that is less discretionary, such as spending on telecommunications, health care, and insurance. The more discretionary the service is, the more cyclical consumer spending on it tends to be.

Housing Sector Activity

Although the housing sector is a small part of the economy relative to overall consumer spending, cyclical swings in activity in the housing market can be large so that the effect on overall economic activity is greater than it otherwise would be.

A few of the important determinants of the housing sector are –

- Mortgage Loan
- Housing costs relative to income
- Speculative activity
- Demographic factor

External Trade Sector Activity

The most important factors determining the level of a country's imports and exports are domestic GDP growth, GDP growth of trading partners, and currency exchange rates. Increasing growth of the domestic GDP leads to increases in purchases of foreign goods while decreasing domestic GDP growth reduces imports. Exports depend on the growth rate of the GDP of other economies. Increasing foreign incomes increases sales to foreigners and decreasing economic growth in foreign countries decreases domestic exports.

An increase in the value of a country's currency makes its goods more expensive to foreign buyers and foreign goods less expensive to domestic buyers. Currency effects can differ in direction from GDP growth effects and change in response to a complex set of variables. The effect of changes in GDP levels and growth rates is more direct and immediate.

Typical business cycle characteristics may be summarized as follows –

Trough

- 1> GDP growth rate changes from negative to positive
- 2> The high unemployment rate, increasing use of overtime and temporary workers.
- 3> Spending on consumer durable goods and housing may increase
- 4> Moderate or decreasing inflation rate

Expansion

- 1> GDP growth rate increases
- 2> The unemployment rate decreases as hiring accelerates
- 3> Investment increases in producers' equipment and home construction
- 4> The inflation rate may increase
- 5> Imports increases as domestic income growth accelerates

Peak

- 1> GDP growth rate decreases
- 2> The unemployment rate decreases but hiring slows
- 3> Consumer spending and business investment grow at a slower rate.
- 4> Inflation rate increases.

Contraction/recession

- 1> GDP growth rate negative
- 2> Hours worked decrease, the unemployment rate may increase
- 3> Consumer spending, home construction, and business investment decreases
- 4> Inflation rate decreases with a lag
- 5> Imports decrease as domestic income growth slows.

The concept of the business cycle is a subject of considerable debate among –

Neoclassical school – economists believe shifts in both aggregate demand and aggregate supply are primarily *driven by the changes in technology* over time. They also believe that economy has a strong tendency towards full-employment equilibrium, as recession puts downward pressure on the money-wage rate, or as over-full employment puts upward pressure on the money-wage rate. They conclude that business cycles result from *temporary deviations from long-run equilibrium*.

Keynesian school – economists believe these fluctuations are primarily due to swings in the level of optimism of those who run businesses. They overinvest and overproduce when they are too optimistic about future growth potential GDP, and they underinvest and underproduce when they are too pessimistic or fearful about the future growth in potential GDP.

New Keynesian school – added the assertion that the prices of productive inputs other than labour are also “Downward Sticky”, presenting additional barriers to the restoration of full-employment equilibrium.

Monetarist school – Monetarists believe the variations in the aggregate demand that cause business cycles are due to variations in the rate of growth of the money supply, likely from *inappropriate decisions by the monetary authorities*. Monetarists believe that recessions can be caused by external shocks or by an inappropriate decrease in the money supply. They suggest that to keep aggregate demand stable and growing, the central should follow a policy of a steady and predictable increase in the money supply.

Austrian school – believe business cycles are caused by *government intervention in the economy*. When policymakers force interest rates down to artificially low levels, firms invest too much capital in long-term and speculative lines of production, compared to actual consumer demand. When these investments turn out poorly, firms must decrease output in those lines, which causes a contraction.

Austrian school economists refer to this misdirection of capital as “malinvestment”. The theory is related closely to the credit cycles.

New Classical school economists introduced **real business cycle theory** (RBC). RBC emphasises the effect of real economic variables such as *changes in technology and external shocks*, as opposed to monetary variables, as the cause of business cycles. RBC applies utility theory. Based on a model in which individuals and firms maximize expected utility, New Classical economists argue that policymakers should not try to counteract business cycles because expansions and contractions are efficient market responses to real external shocks.