CHAPTER 1

EPOCHS IN ECONOMIC HISTORY, 1919–39

INTRODUCTION

The interwar era has been embedded in the collective memory of policy-makers and economists as an epoch of mass unemployment, poor long-run economic growth, disintegrating world trade and excessive volatility in real output. These descriptive details imply that the period was one of change relative to the past. Change, however, does not necessarily mean discontinuity with the past. This chapter evaluates a number of perspectives on the phasing of economic growth as a way of gaining an insight into the extent of continuity and change over time. In order to help the student appreciate the kind of changes that were taking place in the interwar era the appendix to this chapter provides a pictorial survey of some of the key variables that are of interest to macroeconomists.

ECONOMIC EPOCHS AS LONG CYCLES

Economic growth in modern industrial societies has sometimes been viewed in terms of long cycles in output and prices with an approximate duration of fifty to sixty years, often referred to as Kondratieff waves.¹ The cycle is described by a series of

¹ Named after the Russian economist N.D. Kondratieff who analysed the price and output movements of the major industrial countries for the period 1780–1920.
THEMES IN MACROECONOMIC HISTORY

alternating fast and slow phases of economic growth. Kondratieff and a number of more recent empirical analyses (Van Duijn, 1983; Kleinknecht, 1987) offer the following historical timing for the phases of the long cycle:

- 1850–73 Fast economic growth
- 1873–96 Slow economic growth
- 1896–1920 Fast economic growth
- 1920–39 Slow economic growth

Within this framework the interwar period is viewed as the downswing phase of a long cycle, encapsulating an era of slow economic growth, poor investment opportunities, mass unemployment and price deflation. At first sight this approach to history seems a promising one: the phases of economic growth depicted above are also episodes we find discussed in the economic history of the UK, such as the ‘Great Victorian Boom’ (1850–73), the ‘Great Depression’ (1873–96), and the ‘Belle-époque Boom’ (1896–1913). However, the empirical evidence that has been accumulated over recent years suggests that this interpretation of long-run trends is unable to provide an empirically valid phasing of UK economic growth. The long cycle literature has tended to focus on price and monetary movements, neglecting the evidence for the ‘real’ side of the economy. With better and more extensive data on aggregate production and investment than were available in Kondratieff’s time we have to reevaluate his description of trends in the UK economy: aggregate output and productivity growth fail to display the long cycle that Kondratieff assumed (Matthews et al., 1982; Solomou, 1987). The discontinuities of economic growth observed in the interwar period need to be conceptualised within a more historical approach.

MADDISONIAN EPOCHS

A useful approach that places the interwar period in a long-run historical perspective, but not in a cyclical framework, is
EPOCHS IN ECONOMIC HISTORY, 1919–39

Maddison’s theory of epochs in capitalist development. Maddison (1982, 1991) rejects the long cycle framework as being an ahistorical model of economic change; instead he argues that economic growth has followed a number of episodic epochs resulting from institutional and policy regime changes that are specific to each period. The epoch of the classical gold standard* (c.1870–1913) represents a successful phase of economic growth while the period 1913–50 is one of slow and highly volatile economic growth. Each economic epoch is characterised by a number of ‘system characteristics’, defined by:

- the government’s approach to demand management
- the bargaining power and expectations of labour
- the degree of freedom of trade and factor movements
- the character of the international payments system

The interwar period witnessed adverse shifts in a number of these system characteristics: the effect of the First World War on the labour market accelerated the unionisation of the labour force; protection in trade increased in the early 1920s and again in the 1930s; immigration laws in the New World during the 1920s regulated and restricted international labour movements; the classical gold standard of the pre-1913 era gave way to flexible exchange rates in the early 1920s, maladjusted fixed exchange rates in the mid 1920s and discretionary managed rates in the 1930s. Maddison’s approach suggests that the national and international institutional features of the interwar period were unable to sustain the rates of economic performance achieved during the period 1870–1913. His approach has similarities with the ‘maladjustment school’ interpretation of interwar problems, as expressed by the majority report of the Financial Committee of the League of Nations (1932), set up to explain the world depression of 1929–32. This committee argued that deep-seated maladjustments and distortions, partly caused by the First World War,
were largely responsible for the problems of depression and unemployment during the interwar period.

A great deal of emphasis in recent research has been devoted to the impact of the transition to a gold exchange standard in the interwar period. The large exchange rate movements of the early 1920s prevented a more stable reconstruction period of the world economy after the First World War, and the gold standard rules that operated into the early 1930s generated an exceptionally severe world depression as countries had to deflate to sustain the credibility of the gold standard (Temin, 1989; Eichengreen, 1992; Bernanke and James, 1991). Thus, in order to achieve a smoother adjustment after the First World War a different set of institutional arrangements for the world economy were needed. These institutional developments were not to be seen until the New International Economic Order established under the Bretton Woods international payments system after the Second World War.

Maddison’s perspective offers some very useful insights into the role of institutions and institutional change in generating variations in economic growth. The inability of the major countries in the world economy to set up a more appropriate response to the shocks of the First World War is at the heart of explaining the key problems of the interwar era. We should, however, tread carefully if we are to prevent this analysis from becoming a circular perspective along the following lines of argument: appropriate institutions are important to sustaining economic growth; the interwar era was an epoch of unemployment and slow economic growth; therefore, institutions failed in the interwar period. There are a number of important propositions in this black box that need to be analysed further. Although we can make a convincing case that the attempt to return to the gold standard hindered UK economic performance during the 1920s, a case has to be made that the return to gold operated as a long-run constraint over the whole of the interwar period.
EPOCHS IN ECONOMIC HISTORY, 1919–39

This idea is considered further when we evaluate the effects of the macroeconomic policy regime of the 1920s (chapter 2). Many of the other system characteristics also need to be considered in a critical perspective. The increased bargaining power of labour has often been held responsible for the mass unemployment and the higher output volatility of the era. This is a view expounded by some contemporary economists (such as Pigou, 1927) and more recently by some economic historians (Benjamin and Kochin, 1979). The causal paths by which this comes about are not always convincing, as is shown in chapter 3.

In Maddison’s framework major institutional and policy regime shifts can make the system characteristics unfavourable to sustaining rapid economic growth. A more general hypothesis that has been emphasised in the recent macroeconomics literature is the theory of ‘random walks’*: this perspective argues that many different type of shocks can move the economy from one path to another. Thus, economies do not have a natural tendency to settle on a unique path determined by long-run supply-side conditions; instead the economy moves along paths determined by the nature of specific historical shocks. The important point of departure of the random walk idea is that both transitory and permanent shocks can have a displacing effect on the equilibrium path of an economy. History matters, in the sense that transitory events can leave the economy in a permanently changed state. For example, the overvaluation of the UK real exchange rate during 1920–2 (Broadberry, 1986) may have had persistent adverse effects, despite an improvement in the competitiveness of the exchange rate after 1922 (see chapter 2). This approach emphasises a high degree of discontinuity in the path of the economy, justifying an analysis of the kind of shocks and institutional changes that are specific to the interwar experience.
INTERWAR ECONOMIC PERFORMANCE IN A LONG-RUN PERSPECTIVE

In the light of this survey let us consider the long-run macroeconomic performance of the UK. While a long-run approach to economic growth has the advantage of giving us more information about the dynamics of the growth process, the further back we move in historical time the less reliable is the macroeconomic data that we need to consider. For example, the three estimates of GDP before 1913 (income, expenditure and output) have large measurement errors that make it very difficult to determine the time path of the macroeconomy (Solomou and Weale, 1991). However, while these errors are very important to our perception of short-run economic behaviour (such as business cycles), they do not affect our perception of the long-run growth process. All the three estimates of GDP show that aggregate real output was growing at approximately 2 per cent per annum between 1870 and 1913 (Feinstein et al., 1982; Solomou, 1987; Crafts et al., 1989). Deviations about this mean growth rate did take place but the macroeconomy showed a tendency to return to the underlying long-run growth rate. This pattern of growth can be described as ‘trend-stationary’* and is illustrated in a stylised form in figure 1.1.

Describing the initial growth conditions of the pre-1913 period as ‘trend-stationary’ along a steady path is quite different from the idea that UK macroeconomic performance underwent a ‘climacteric’ at the end of the nineteenth century: this latter perspective depicts the UK economy as undergoing a deceleration in trend growth during 1870–1913 and particularly during the Edwardian period, 1899–1913 (Feinstein et al., 1982). The evidence for this view comes from an analysis of the compromise estimate of GDP (an average of the income, expenditure and output estimates) which shows growth rates
Figure 1.1: A stylised view of pre-1913 economic growth

Note: The figure depicts a stylised view of long-run economic growth during 1870–1913. The average growth rate during 1870–1913 was 2 per cent per annum. The deviations about the long-run trend can be described as business cycle and long swing about the long-run trend of the economy.

falling from 2.1 per cent per annum during the period 1856–99 to 1.3 per cent during 1899–1913 (see figure 1.2). The validity of this interpretation hinges on the usefulness of the compromise estimate of GDP to describe the macroeconomic behaviour of the pre-1913 era: the compromise estimate would be a useful approximation of the behaviour of the macroeconomy if two important conditions are satisfied:

- the three estimates of GDP are independent of each other and are of equal reliability; and
- the measurement errors between the three estimates are random.

Neither of these assumptions is valid: the various components of GDP are of different reliabilities and the errors are clearly not random. The climacteric observed in the compromise estimate is a statistical artifact and the explanation for it is to be found in the data construction methods rather than in the
Figure 1.2: A stylised view of the UK climacteric

Note: This figure depicts the UK growth path undergoing a structural break during 1899–1913 relative to the period 1856–99. While the rate of GDP growth had averaged 2 per cent per annum before 1899, during 1899–1913 the economy settled on a low growth path of 1.3 per cent per annum.

true behaviour of the economy. The three estimates of GDP, considered individually, do not provide any evidence for a climacteric in the late nineteenth-century aggregate production trends: the output estimate shows steady growth throughout 1856–1913; the income and expenditure estimates follow a path of steady growth with a long swing pattern of alternating ‘upswings’ and ‘downswings’ of growth over shorter intervals. Thus, it is the simple averaging process used to construct the compromise estimate which is generating the observed climacteric in the macroeconomic data. In the light of these data problems, Solomou and Weale (1991) estimated a balanced measure of GDP to average the disaggregated component series.\(^2\) The

\(^2\) The main advantage of the balanced estimate of GDP over the compromise estimate is that the former uses information about the reliabilities of the disaggregated component series in constructing the estimate of aggregate GDP.
EPOCHS IN ECONOMIC HISTORY, 1919–39

balanced series shows that long-run economic growth during 1899–1913 was comparable to the era 1873–90. A second line of criticism of the climacteric perspective can be found in the work of Crafts et al. (1989); using modern time series techniques to estimate the trend movement they argue that GDP followed a steady trend-stationary path over the period 1870–1913. Although some retardation was observed in the Edwardian period (1899–1913) this is best described as a mild long swing cyclical retardation, not a trend retardation.

In the light of this evidence a pertinent question to ask is, how successful was the interwar economy in returning to the pre-1913 growth path? We can glimpse at the changes taking place from the results reported in table 1.1: while UK GDP growth had averaged approximately 2 per cent per annum during 1870–1913, the long-run average growth rate for the period 1913–37 was only 1 per cent per annum. This can be represented as a transition to slower long-run economic growth as depicted in figure 1.3. A more realistic approximation to the changes taking place in the era 1913–37 can be seen from table 1.2. For most of the interwar period (1925–37) long-run output growth averaged 2 per cent per annum, a rate that is comparable to the pre-1913 epoch: adverse shocks accounting for the poor long-run performance during the long period 1913–37 are to be found in the trans-war period* of 1913–25 (Broadberry, 1990). This more detailed description of the growth process suggests that the shocks of the First World War and the immediate post-war reconstruction period* had persistent adverse effects on long-run macroeconomic performance. A stylised view of this is presented in figure 1.4. In the absence of the adverse shocks of the trans-war years the potential growth path of the macroeconomy would have yielded an output level that was significantly higher throughout the interwar era. This interpretation of the changes taking place in the period 1913–37 relative to 1870–1913 can be
### THEMES IN MACROECONOMIC HISTORY

#### Table 1.1. Long-term growth measures: GDP, 1870–1937

<table>
<thead>
<tr>
<th>Period</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870–1913</td>
<td>2.0</td>
</tr>
<tr>
<td>1913–37</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Source: Feinstein (1972).

#### Table 1.2. Medium-term growth measures: GDP, 1913–37

<table>
<thead>
<tr>
<th>Period</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1913–25</td>
<td>0.0</td>
</tr>
<tr>
<td>1925–9</td>
<td>2.0</td>
</tr>
<tr>
<td>1929–37</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Source: Feinstein (1972).

![Figure 1.3](image-url)

**Figure 1.3**: A first approximation to interwar economic growth

Note: This figure illustrates that although the growth process generated stable growth during 1870–1913, economic growth was not steady during the interperiod comparisons of 1870–1937.