Timothy Kehoe & Edward Prescott (eds), *Great Depressions of the Twentieth Century*

(Federal Reserve Bank of Minneapolis, 2007)

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What makes a Great Depression? Worldwide mass unemployment and shrinking output, as in the 1930s? Or secular deflation, as in the late nineteenth century?

In this collection, none of these conditions — unemployment, deflation, absolute falls in output or worldwide contagion — is necessary. A Great Depression is simply a 20 per cent fall in output per capita, relative to a 2 per cent p.a. trend, in any single country. Thus it includes recent periods in Latin America, Japan, Switzerland, New Zealand, and Finland, as well as America and Europe in the 1930s, even if they do not all meet the strict criteria for 'greatness'.

All of these episodes are subjected to a growth-certain accounting framework: per-capita growth is decomposed into changes in hours worked, the capital-output ratio, and a residual (TFP). [2] The residuals are then used in simulations with a dynamic general equilibrium model. These simulations can usually reproduce a fair share of the observed variation in output, although hours worked often recover more slowly than the model predicts. Based on these results, the editors make the extremely strong claim that 'government policies that affect TFP and hours per working-age person are the crucial determinants of the great depressions of the twentieth century' (p.15).

This claim is unproven, and highly dubious. It is true that in most countries the residual plays the largest role, followed by hours, and capital is insignificant. This might, however, be an artefact of the methodology rather than the data. Tracking output per capita and capital relative to output would tend to maximise the measured residual, and minimise the role of capital. A standard Solow

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[2] The familiar Solovian growth accounting states

gY = gA + sL.gL + sK.gK (g indicates growth rate, s factor share)

The present authors add two more identities

gL = gh + gN and gK = gk + gY (h =hours, N = persons, k = capital per unit of output)

and through substitution obtain

gy = gA/sL + gh + sK.gk/sL (y = output per person)

This is what they use.

decomposition using total output, capital and labour could have given very different results.

Even if the decomposition used here is preferable, it is a giant leap from accounting to policy. The interpretation of the residual as TFP is controversial even in long-run growth theory. It would take a brave man indeed to attribute short-run fluctuations in TFP to particular policies. And indeed, most of the contributors are more restrained than the editors. There are ritual nods to deregulated finance, competition, and trade, but most are content to leave TFP as a mystery. I certainly would not like to explain in those terms why the New Deal-ridden US saw TFP return to trend while Canada, with no significant policy changes, did not. Or why lack of fiscal discipline in Argentina should be sufficient to produce a collapse in productivity, except through some nominal channel.

Equally, on the labour side, it seems rather unfair to blame high German wages on government policy in a period when wages were actually being reduced by decree. Let alone 'Once … wages were again market-determined, the German economy recovered as theory predicts.' Market determined? In *Nazi Germany?!* With wages set by the government-controlled Labour Front, and workers legally unable to change jobs without the consent of their employer?

Not all of the speculation is so unreasonable. It is perfectly plausible that British welfare policy retarded labour mobility in response to negative shocks in coal and textiles, or that Chile's superior bankruptcy law and freer access to finance helped it grow faster than Mexico. Yet it remains, for the most part, speculation. The growth accounting and simulations prove little. Indeed, some of the most interesting results come from other methods: the brief analyses of the role (or lack thereof) of banking in the US and Japan are an example. This is one of the few times when alternative explanations are considered explicitly, which is curious, given that the book's own website proclaims that it 'challenges the Keynesian theory of depressions'.

Overall, *Great Depressions* represents an unconvincing attempt to take real business-cycle theory to the extreme. While I would not say that it contains nothing of value, it does not establish either the specific claims of the editors, or the more general case that growth theory is useful in understanding depressions. Put another way, it does not prove that collapsing the distinction between depressions and growth accelerations/decelerations, as is implied by the use of a common growth trend, is a good idea.

In a way, this is a relief. After decades of research into economic growth, there is consensus of a kind: growth is caused by TFP, but we don't really know what drives it. If we were to believe this volume, depressions are also (largely) about TFP. Such an extension of the field of our ignorance would be, no pun intended, greatly depressing.