

## [The UK \(and Western\) Productivity Puzzle: Does Arthur Lewis Hold the Key?](#)

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Nicholas Oulton

Centre For Macroeconomics, National Institute of Economic and Social Research and Economic Statistics Centre of Excellence

I propose a new explanation for the UK productivity puzzle: a decade of stagnating labour productivity accompanied by low unemployment and high rates of job creation. Prior to the recession which started in early 2008, labour productivity in the UK was rising rapidly as was labour input (hours worked). Subsequently labour input has continued to grow at much the same rate while productivity growth has been essentially zero. The UK puzzle is part of a wider Western productivity puzzle which has seen growth rates of labour productivity decline in most advanced countries.

Drawing inspiration from a seminal article by Arthur Lewis published in 1954, entitled “Economic development with unlimited supplies of labour”, I suggest a new explanation with the following features. In good times, standard growth theory (the Solow model) provides a reasonable description of the growth of output, capital and productivity. A feature of the Solow model is that productivity growth is independent of the growth rate of labour input. The Solow model gives no special role to foreign demand for a country’s exports. In what I call the neo-Lewis model, I graft the Lewis growth model onto a standard Solow growth model. The neo-Lewis model is identical to the Solow model in good times. But in bad times foreign demand for a country’s exports is constrained and below potential supply. Lower growth of exports leads to lower growth of GDP. The result is that if labour supply continues to grow at the same rate after the ending of a boom as during the boom then the growth of labour productivity and of capital intensity will fall, possibly to zero. A notable feature of the model is that a single country cannot escape its problems by expansionary monetary and fiscal policies, since the root cause is deficient demand for its exports.

This is the UK’s situation which I argue is due to our flexible labour market which makes us very receptive to immigration. Immigration is responsible for most of the growth of the UK’s labour input. In much of the rest of the EU labour markets are less flexible and immigrants are less able to compete with natives for jobs. So in these countries the growth of labour input has been much lower and in some countries even negative after the end of the boom. Hence productivity growth has been higher there but at the cost of lower job creation and higher unemployment. In other words, different outcomes for labour productivity across Europe are mainly due to different labour market institutions.

I test the model on cross-country data for 23 countries (20 in the EU plus Australia, Canada and the US), comparing the boom of 2000-2007 with the recession and recovery of 2007- 2015, and find it

broadly supported by the data. The greater the decline in export demand, and the smaller the decline in labour input, the greater the fall in labour productivity growth.

A lower growth rate of capital intensity is not however the whole story, since the UK and the other countries studied here have also seen a large fall in total factor productivity (TFP) growth as well. Based on earlier industry-based studies I argue that the decline in TFP growth is also a consequence of slow growth in GDP since 2007, in turn due to constrained demand for exports as emphasised by the neo-Lewis model. Using a larger sample of 52 countries, I find that the countries with the largest falls in GDP growth also had the largest falls in TFP growth. I argue that this relationship is causal, running from GDP to TFP, and is due to a form of increasing returns but working here in the malign, reverse direction.