Growing, shrinking and long run economic performance

By Stephen Broadberry and John Wallis

To date, most work on long run economic performance has focused on 'growing', but recent work for the post-1950 period has suggested that economies vary at least as much in how they 'shrink' as in how they grow.

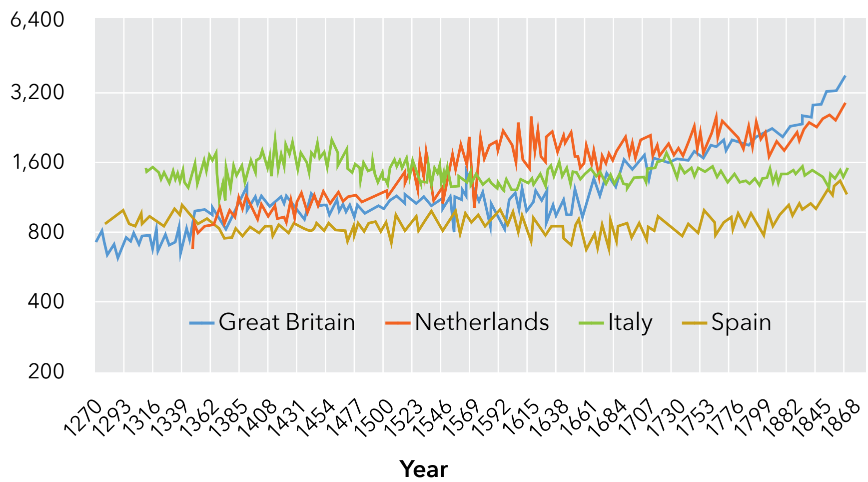
DESPITE THESE FINDINGS on the volatility of GDP per capita in poor countries, there has been little research into why the economies of poorer countries shrink so often or by so much. Furthermore, economic historians have not systematically investigated the possibility that improved long run economic performance since the eighteenth century could have been due to these economies shrinking, or falling back, less rather than growing faster. In new research, we show that to understand economic performance over the long run, we need to explain a reduction in the rate and frequency of shrinking rather than an increase in the rate of growing (Broadberry and Wallis, 2017). ▶

Empirical evidence on the importance of shrinking

Figure 1 plots per capita GDP for four European economies over the period 1270-1870. For Italy and Spain, there was a clear alternation of periods of positive and negative trend growth over periods of a decade or more, with growth booms typically followed by growth reversals, leaving little or no progress in the level of per capita incomes over the long run. Per capita GDP therefore fluctuated without long run trend before the mid-nineteenth century. For the cases of Britain and the Netherlands, although there were alternating periods of positive and negative growth until the eighteenth century, there was also a clear upward trend over the long run, with the gains following the Black Death being retained, and the growth reversals eventually disappearing with the transition to modern economic growth in the eighteenth century. As periods of negative growth became less frequent and as the rate of shrinking decreased in Northwestern Europe, Britain and Holland overtook Italy and Spain.

Economic performance over time is the aggregation of short run changes measured at the annual level. In three data sets covering the period from the 13th century to the present, we show that better long run economic performance has generally occurred not so much because of an increase in the rate of growing, but more because of a decrease in the frequency and severity of periods of decline.

Figure 1: Real GDP per capita in Britain, the Netherlands, Italy and Spain 1270-1870 (1990 international dollars, the logarithm of GDP per capita)



Explaining why some economies shrink more

These empirical results suggest two social patterns. One pattern is societies with high growing rates, high shrinking rates and high shrinking frequencies, resulting in less, little, or no growth over the long term. This pattern has dominated human history for the last 10,000 years. The other pattern is societies with low growing rates, low shrinking rates and low shrinking frequencies, resulting in slow but steady growth over the long term. This second pattern appeared only after 1700, and then only in a handful of societies. This raises an obvious question: can we find corollary patterns in the historical record?

We consider some possible factors: structural change from an agricultural sector dependent on the vicissitudes of the weather to a more stable service sector; technological change, transforming downturns from an absolute decline in output to a slower rate of positive growth; demographic change with fertility control leading to the avoidance of over-population and diminishing returns. But taken together, these factors do not provide a full explanation. More important is the rise of the rule of law.

North, Wallis and Weingast (2009) analysed how societies create and sustain social order, with important implications for the nature of rules. Violence arises not just during periods of formal warfare between states, but also during periods of civil conflict, and social orders attempt to limit such violence. Coalitions of powerful individuals can manipulate economic privileges to create rents, and to the extent that those rents are adversely affected by violence, they have a credible incentive to reach agreements not to use violence. Those agreements operate within narrow ranges of circumstances, and outside those ranges, agreements break down and economies shrink. North, Wallis and Weingast call this the "natural state". Here, rules have to recognise the privileges of powerful elites, and one of those privileges is that rules apply differently to elites, and also differently to different elites. The rules that emerge in a natural state are 'identity rules' whose form and enforcement differ according to the organisational identity of individuals. While identity rules may persist, they are essentially a solution to short run problems that exacerbate long run instability. Identity rules treat different elites differently and therefore, as elite identities change over time, how the rules apply will differ among elites. When circumstances change sufficiently, existing institutional agreements cannot solve problems of elite coordination. The result is disorder and violence, which leads in turn to shrinking.

Long run development, without growth reversals, therefore requires the transition from a world of identity rules to a world of impersonal rules, which are applied equally to all. Such institutional change is always difficult to bring about, however, because it requires the most powerful elites to give up their privileges. When challenged by new elites who have accumulated more wealth, it is easy

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to understand the reluctance of established elites to give up their power to bias rule enforcement in their favour. The resort to violence that often accompanies such struggles, and leads to shrinking, is also easy to understand. However, it is also possible to envisage a peaceful way out of such an impasse. This is due to the "paradox of privilege". Business relationships which would be viable in an impersonal rule society may not be viable in an identity rule society, simply because there is no mechanism for the most powerful elites to credibly commit to an agreement that could be enforced against them in the courts (which will always rule in their favour in an identity rule society). The most powerful elites may therefore be excluded from new highly profitable business ventures simply because the better informed but less powerful elites cannot risk signing a contract with them, since if a dispute arises they know the courts will rule in favour of the more powerful. In such circumstances, elites may find it worthwhile to give up their position of legal privilege to be able to participate in highly profitable economic projects. Such transitions seem to occur only rarely, which explains why the process of development spread so slowly after its first appearance in Britain during the Industrial Revolution. It also explains the continuing vulnerability of many poor economies in the developing world to episodes of shrinking. ◀

Growth reversals in the modern world

Many African countries have experienced growth reversals. Previous periods of rapid growth across Africa have often been followed by phases of economic decline which have erased many of the gains countries have achieved in per capita income. Africa's transition to modern economic growth will require a break in the boom-and-bust pattern which has characterised its economic performance during much of the 20th century.

Post-independence political conflict resulted in several growth reversals in Nigeria. In 1958 the World Bank claimed that Nigeria's prospects for growth based on its agricultural exports (including palm oil, cocoa, ground nuts, cotton and rubber) were good, but they depended on 'Nigerians' success in eliminating tribal or regional antagonisms and maintaining reasonably high standards in public administration' (World Bank 1958). The Biafran War of the late 1960s reversed earlier gains, and GDP per capita fell to below its 1950 level (Iyoha and Orioaki 2008). The oil boom of the 1970s led once again to

positive growth, but oil revenue had little lasting impact on per capita GDP, which declined in the 1980s and remained stagnant throughout the 1990s (Collier and Gunning 2008). Since 2000, oil production and expansion in agriculture and services have led to a period of renewed economic growth, but the country remains overwhelmingly dependent on its energy sector.

Contrasting examples of this are seen in Korea, Taiwan and Singapore which had 30 to 35 years of rapid growth from the early 1960s to the late 1990s when the Asian Crisis intervened after which these economies started growing again. Or the UK, where between 1947 and 1973 the economy grew consistently over a 26 year period with growth declining for only one to two quarters within this period.

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