

Replies to my commentators

Peer Vries

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1 Introductory remarks

I feel enormously honoured, and flattered, by the fact that so many eminent scholars have been willing to review my book, and not take it apart. I want to thank them for that. As I simply lack the space to deal with all of their comments, I had to make a selection. I have focused on their critical remarks, which will strengthen Jan de Vries in his view that I ‘have yet to encounter the scholar to whom I feel the need to defer without first offering a moment of intellectual resistance’. I gather this is not meant as a compliment. But in a way it is correct: to me scholarship is not a matter of deference i.e. submitting to another person’s wishes, opinion, or governance through respect, but of debate. In the following text I will try and respond thematically to what I consider to be the main comments. I will use *EP* as abbreviation for *Escaping poverty* and *SEGD* as abbreviation for my new book *State, economy and the Great Divergence. Great Britain and China, 1680-1850s* (London 2015).

2 The subject of the book: the origins of modern economic growth

My book is about the origins of modern economic growth. I define that growth as a substantial and sustained increase of real income per capita driven by permanent innovation, referring to innovation in the use of energy and resources, in technology, and in institutions (*EP*, 22-28 and 73). In my view, such growth did not exist before the period of industrialization in Great Britain. My focus is on its take-off, on ‘how it all began’ (*EP*, 33). I am quite explicit that I consider innovation its main motor and *not* geography, luck, accumulation and increased input of capital, hard work, size of po-

pulation, or 'the rise of the market'. Those can all contribute to it but without innovation growth peters out. My explanandum is thus *not* primarily the Great Divergence as such, but the growth that *caused* it.

The current debate on the Great Divergence functioned as its point of departure but my book clearly enters the much broader debate concerning the origins of modern growth although of course in practice both debates often conflate. Considering my bibliography of 40 pages, I can only be surprised by De Vries's claim, that: '(...) the Great Divergence literature is not large. Even after more than 15 years, it consists of 5 or 6 core, book-length academic contributions. A sizeable penumbra of programmatic statements and responses to critics envelops this core, and all this is flanked by works by well-wishers and fellow travellers that address ancillary themes in what might be called a Great Divergence spirit'. Fortunately several other reviewers see things quite differently. Deng and O'Brien praise my 'engagement with a virtual library of recent literature (...) on the origins of modern economic growth'. Goldstone comments '(...) one can hardly go wrong taking Vries's bibliography as an exhaustive and up-to-date list of relevant readings for debates on the Great Divergence and its causes'. Jones refers to 'a torrent of relevant publications' since 1988, whereas Mokyr writes that I give a 'monumental overview of a vast and multi-faceted literature'. According to De Vries the literature about my 'subject' is not only fairly confined in quantity but also not very impressive in quality: '(...) the overall design of *Escaping poverty* pays the Great Divergence literature the compliment of taking the economics of its arguments more seriously than they deserve, or than many of its contributors probably intended'.

De Vries seems to actually wonder why I wrote the book. My answer would be: Because it deals with one of the most lively and relevant debates in economic history that has attracted many of the sharpest and I admit some not so sharp minds in that discipline. He certainly is correct to point out that: 'It would be a misunderstanding of the Great Divergence literature to suppose it emerged out of a careful assessment of the many theoretical contributions found in the economic history literature'. But I do not suppose that. Nor do I assume, as he suggests, that authors writing about the Great Divergence would want to make 'contributions to economic theory'. I simply wanted to 'test' their claims in light of that theory (*EP*, 79).

As several reviewers correctly point out, Great Britain and China figure prominently in my book. But they do so as examples and for illustration. I tackle the problem of the emergence of modern economic growth on a much broader scale, geographically and theoretically, than most Great-Divergence studies directly inspired by Pomeranz, as a mere glance at the

book's index would already show. The current focus on China – and here I fully agree with Jones – certainly is a consequence of the 'rise' of that country and its economy over the last decades. I can only share Jones's amazement that so much attention is paid to the situation in Qing China and so little to Sung China.

3 To what extent did the world indeed escape poverty with modern economic growth?

Parthasarathi interprets 'poverty' as living at the level of subsistence and points out that several parts of the world already lived above subsistence before industrialization began in Great Britain. I can only respond that I never denied that. I am not a hard-core Malthusianist as readers of my book can ascertain (see e.g. *EP*, 42-43 and 66-79). De Vries's comment that I would not 'pause to consider the claims of Malthusian fundamentalists' like e.g. Gregory Clark, is simply incorrect (see *EP*, 73-79). Advanced organic societies certainly could and did reach higher levels of wealth than 'normal' organic societies but in my view, as compared to current, modern Western standards, even the most advanced economies were poor and stagnant before modern economic growth emerged. I of course nowhere claim that *everybody* escaped poverty: in that case there would be no Great Divergence. Nor do I claim that there would be one universal route towards economic modernity. I would resolutely reject such a claim: I just intensively study the pre-conditions of the first take-off.

In this context Parthasarathi brings up an interesting point: 'So far from escaping poverty, the period of modern economic growth in Europe coincided with the creation of mass Indian poverty'. I agree, one might even claim that Europe, in this case the United Kingdom, was partly to blame for that poverty. In China too, overall, the economic situation did certainly not improve during most of the nineteenth century and the first half of the twentieth century. But what does this mean for my analysis of the emergence of modern economic growth at a certain place and time, to wit in Great Britain sometime during the very long eighteenth century? Does Parthasarathi hint at some *general* causal connection between modern economic growth and non-growth, in the sense that such growth can only emerge someplace at the cost of non-growth and even increasing poverty someplace else, at a *specific* causal connection in this case or only at a *coincidence*? My emphasis on the role of innovation implies that I do not *in principle* consider modern economic growth as something that is only possible at the cost of non-growth or even impoverishment.

The fact that the emergence of modern economic growth is my explanandum means that I am not interested in just any gap in wealth and income. The existence of such gaps between different regions in the world already *before* the emergence of modern economic growth, is widely accepted. I personally harbour no doubts that they existed (see e.g. *EP*, 74). To De Vries, however, the fact that quantitative studies by economic historians would have revealed ‘substantial and growing gaps between Europe and Asia, but more specifically between North-western Europe and the rest of Eurasia (...) dating from no later than the first half of the seventeenth century’ apparently indicates that I am mistaken in focusing so much on industrializing Great Britain and in assuming it provides the first instance of modern economic growth. Goldstone, in contrast, emphasizes there was *no* such gap – in any case *not* between Great Britain and China – before Great Britain’s industrialization. He firmly rejects my claim that ‘firm doubts that Britain was wealthier (before the onset of modern economic growth) no longer exist’. So interestingly enough I am criticized for not taking a gap seriously enough *and* for assuming it would exist. Some further comments clearly are in order.

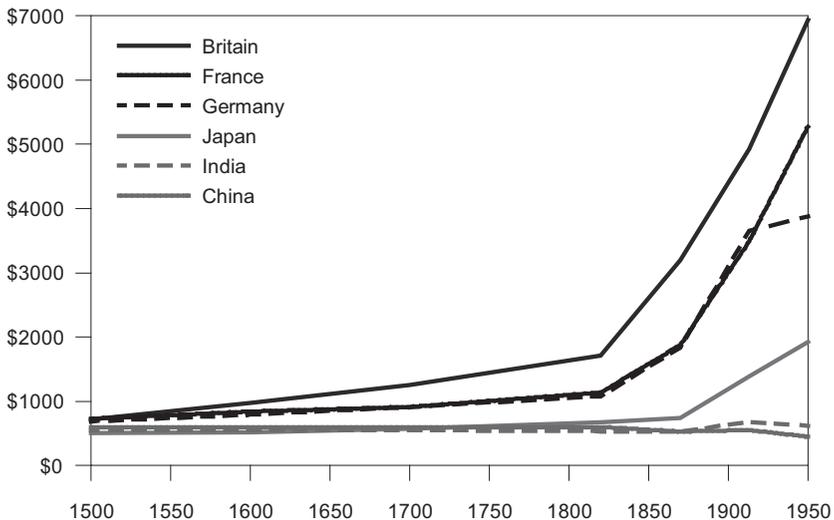


Figure 1. *The beginning of modern economic growth and the Great Divergence*

Based on information in: Angus Maddison, *The world economy. A millennial perspective* (Paris 2001).

The dollars are expressed in terms of 1990 purchasing power parity

Fortunately Kent Deng and Patrick O'Brien, in their article in this issue and elsewhere¹, have very recently discussed differences in income between parts of the world over the early modern era and far into the nineteenth century, again with a focus on Great Britain and China. I fully endorse their critique of Maddison's estimates of China's GDP and PPP for that period that I need not repeat here (see their article in this issue). They are not as harsh as Gregory Clark but their message, for this case, is identical: Maddison's estimates apparently contain quite some science fiction.² There are several recent estimates that improve on them but in my view we simply have to accept that estimates of China's GDP before the twentieth century can never be more than extremely speculative guesstimates.³ Estimates of real wages for China and Great Britain and for several other countries for the same era methodologically and empirically have a much sounder basis but their value for our analysis nevertheless is problematic as wage labour in China, in contrast to Great Britain, was so exceptional in the period under discussion.⁴ In all probability net annual incomes and per capita consumption levels of peasant households are the best indicators of the standard of living in a country like preindustrial China. The figures that Deng and O'Brien come up with about them inspire confidence.⁵

Evaluating the literature, my conclusion is that, whether one looks at GDP, real wages or net incomes, the situation in China over the very long

1 See note 5.

2 See his review of Angus Maddison, *Contours of the world economy, 1-2030 A.D.* (Oxford 2007) in *Journal of Economic History*, 69, 4 (2009) 1156-1162. Also of interest are Morten Jerven, 'An unlevel playing field. National income estimates and reciprocal comparison in global economic history', *Journal of Global History* 7 (2012) 107-128 and the literature referred to in the article by O'Brien and Deng in this issue.

3 See e.g. Stephen Broadberry, Hanhui Guan and David Daokui Li, 'China, Europe and the Great divergence: a study in historical national accounting, 980-1850', <http://eh.net/eha/wp-content/uploads/2014/05/Broadberry.pdf> and Ye Ma, Herman de Jong and Tianshu Chu, 'Living standards in China between 1840 and 1912: A new estimate of gross domestic product per capita', <http://ggdc.eldoc.ub.rug.nl/FILES/root/WorkPap/2014/GD-147/gd147.pdf>. See also, very preliminary, Shi Zhihong, Xuyi, Ni Yuping and Bas van Leeuwen, 'Chinese national income, ca. 1661-1933', <http://www.basvanleeuwen.net/bestanden/ChineseGDP.pdf> Already somewhat older is T. Liu, 'An estimation of China's GDP from 1600 to 1840', *Economic Research Journal*, 10 (2009) 144-155.

4 Robert C. Allen, et al, 'Wages, prices, and living standards in China, 1738-1925: in comparison with Europe, Japan and India', *The Economic History Review* 64, 1 (2011) 8-38.

5 See apart from the article by Deng and O'Brien in this issue also their 'Clarifying data for reciprocal comparisons of nutritional standards of living in England and the Yangtze delta (Jiangnan), c. 1644-c.1840', The London School of Economics and Political Science, Economic History Working Papers Series no 207/2014 and R.C. Allen, 'Agricultural productivity and rural incomes in England and the Yangtze Delta, c. 1620-c. 1820', *The Economic History Review* 62, 3 (2009) 525-550.

eighteenth century that I focus on was worse than in North-western Europe, and deteriorating. Great Britain in all probability was wealthier than the wealthiest parts of China. It thus looks as if Goldstone is somewhat too optimistic about China's wealth. The most trustworthy and relevant estimates in my view, however, only show a relatively small gap. The gap that emerged with industrialization was several times bigger. Before industrialization we are still dealing with relatively minor differences as can exist between organic economies with their ups and downs. That is what I meant when I wrote '(...) the differences between Britain and China before roughly 1700 or 1750 did not yet make a big difference in terms of wealth. Nor did they point at fundamentally different economies in terms of their potential' (*EP*, 44). My position is that Great Britain and China both were *advanced* organic economies that both weren't in a poverty trap, but that on the other hand they still both were subject to 'Malthusian constraints'. De Vries, however, is right in his comments on this quote: I should have expressed myself more clearly and unequivocally.

But what is essential for my analysis is not how rich Great Britain or China, or any other country, exactly were, but whether and when their economies were experiencing modern growth. Great Britain crossed a threshold with its industrialization. In Qing China at the same moment in time no path-breaking innovations, no sustained increase in the use of non-human energy, wage labour, implements, or economies of scale occurred. What we see is adaptation, intensification, a high-level equilibrium at best and involution at worst, but no transition from an 'advanced organic economy' to a 'mineral-based energy economy' with accompanying innovations in technology and institutions.⁶ It is that transition that did occur in Great Britain' which caused the Great Divergence.

4 Great Divergence, Industrial Revolution and modern economic growth

In my book there indeed is a focus on explaining Britain's Industrial Revolution. Unsurprisingly, considering the fact that this revolution for me is the first phase of modern economic growth. According to De Vries that would distinguish my approach from that of the California School: 'Most participants in the Great Divergence literature (sic) take the Industrial

⁶ See for the two concepts in quotes E.A Wrigley, *Continuity, chance and change. The character of the Industrial Revolution in England* (Cambridge 1988) chapters 2 and 3.

Revolution, or a particular stylized and dated version of it, as a given () their concern is not to better understand its 'inner workings'. It is to establish claims about before and after the Industrial Revolution'. In his view 'their historical analyses have not been primarily about the Industrial Revolution'. Considering what most participants in that literature themselves claim and considering the discussions they engage in that seems very improbable. I lack space to do so but I could provide numerous quotes that clearly show the opposite.

According to De Vries, explaining the Great Divergence is something essentially different from explaining the Industrial Revolution because according to him there already was a gap in wealth and development between North-western Europe and the rest of Eurasia long before industrialization. Apart from the fact that this gap certainly was relatively small, this as such cannot count as a refutation of my claim that modern economic growth started with industrialization. Such a refutation would have to consist in presenting an instance of modern economic growth that set in *earlier* than the one in Great Britain in the eighteenth century. In his book with Ad van der Woude, De Vries describes the period in the economic history of the Dutch Republic from 1500 to 1815 as the first round of 'modern economic growth'.⁷ So I guess he has this 'case' in mind. In my view, though, the Dutch Republic in this period provides a perfect example of an 'advanced organic economy' à la Wrigley that went through an impressive 'efflorescence' à la Goldstone and quickly ended up in what Smith refers to as 'stationary state'.⁸ But it certainly is *not* an example of modern economic growth as I interpret that term. In De Vries's own words the Dutch Republic went through a 'relatively brief period of vigorous growth' (1580-1663), succeeded by periods of adaptation and crisis. GDP per capita already from the 1650s onwards had a tendency to decrease and wages became rigid for a long period after the mid-seventeenth century.⁹ Innovation, whether in the use of energy, technology or in the sphere of institutions quite quickly

7 I refer to Jan de Vries and Ad van der Woude, *The first modern economy. Success, failure, and perseverance of the Dutch economy from 1500 to 1815* (Cambridge 1997). The book originally appeared in Dutch as, *Nederland 1500-1815. De eerste ronde van moderne economische groei* (Amsterdam 1995), which translated in English would read *The Netherlands 1500-1815. The first round of modern economic growth*.

8 See Wrigley, *Continuity, chance and change*; J.A. Goldstone, 'Efflorescences and economic growth in world history. Rethinking the 'Rise of the West' and the Industrial Revolution', *Journal of World History* 13, 2 (2002) 323-389, and Adam Smith, *An inquiry into the nature and causes of the wealth of nations* (originally London 1776). I use the Liberty Fund Edition; Indianapolis 1981, Volume LIX, 111-115.

9 See De Vries and Van der Woude, *The first modern economy*, 629-632 and 706.

petered out. Apparently, even the most advanced organic economy fairly quickly hit a ceiling. De Vries's suggestion that the growth we know since industrialization actually also is not really sustained because it too will peter out, is not very to the point. It has already lasted for far longer and has been much higher than any phase of growth we have ever witnessed before and it has a different 'driving force'. It moreover still persists. Dutch GDP per capita in real terms has doubled since De Vries and Van de Woude first made their gloomy predictions in 1995.¹⁰

Some comments are in order here with regard to my use of the expression 'the Industrial Revolution'. I emphasize that Britain's modern growth occurred over a broad range of activities in manufacturing but also in agriculture and services and that in that respect identifying the emergence of modern economic growth with 'industrialization' in the confined sense of the revolutionizing of manufacturing is actually mistaken. I use the concept in a broader sense. (*EP*, 25-27) My Industrial Revolution, moreover, to quote Jones, is a 'compressed period' but not one that 'rose abruptly, *ex nihilo*, amidst a sea of backwardness.' It fitted in a trajectory. Early modern Great Britain was undoubtedly on a road that made an emerging of modern economic growth there far less unlikely than in Qing China. (See e.g. *EP*, 437-438) This makes the Industrial Revolution less miraculous, but does not turn it into something inevitable. Its actual occurrence meant a break that has to be explained. In this context Goldstone would place more emphasis on a series of 'great reversals' that took place over the period 1500-1850. I am aware of those reversals. There is no such thing as a 'rising Europe'. We see ups and downs and differences between regions and their development. (*EP*, 27-33) But it is not clear to me what exactly taking them on board would mean for the general gist of my book.

5 Science and technology

Goldstone and Mokyr refer to my comments on the role of science and technology and endorse them. That is not surprising. I often base my comments on their work and that of e.g. Leonard Dudley, Margaret Jacob or Christine MacLeod. Like Mokyr I am a great admirer of Floris Cohen's comparative analysis of the origins of modern science in the West and like him I endorse Cohen's ideas about the importance of that science for

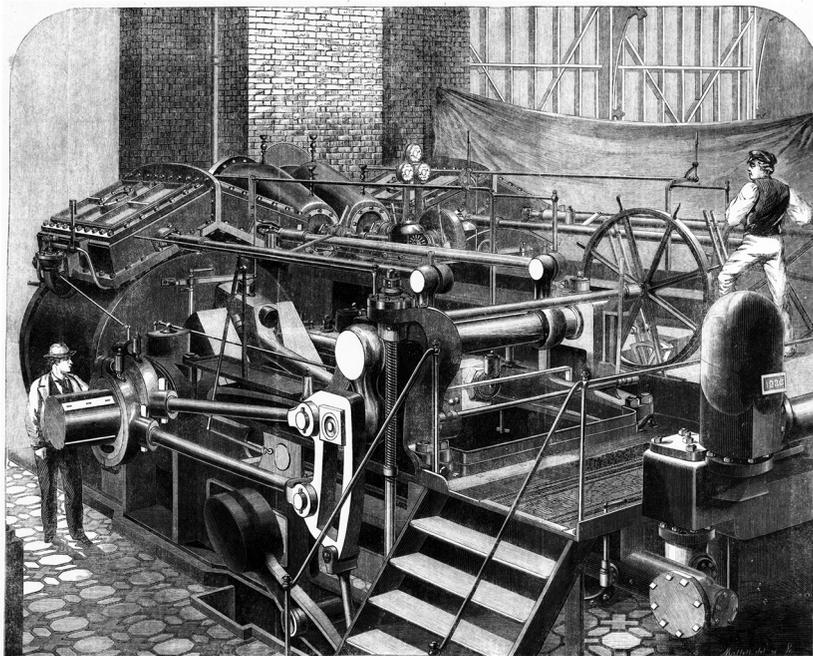
¹⁰ See for several telling quotes *ibidem*, 720 and 722.

the Industrial Revolution.¹¹ I am convinced that science, scientific culture and technology were very important for Great Britain's escape from poverty. Without the changes and innovations that Goldstone and Mokyr emphasize in their work and without what was behind them, that escape would certainly be inexplicable. I am convinced that Great Britain had 'Enlightenment' and China did not. There certainly is a difference in emphasis between me and Goldstone/Mokyr in the sense that in my analysis factors like the role of the state, factor endowments and relative prices and the international context get more attention. Whereas Goldstone and Mokyr write that I might have put (even) more emphasis on European science and scientific culture and technology, Parthasarathi thinks I exaggerate their exceptionality. I am aware of the developments in history of science and technology he refers to but I fail to see what they mean for the question that is central in my book and, more importantly: If I am mistaken in assuming a scientific-technological gulf between North-western Europe and India, then why has no one ever come up with a list of Indian innovations and inventions that is equivalent or in any case comes somewhere near my lists of European innovations and scientific breakthroughs? (*EP*, 308-310 and 314)

6 Institutions

In debates on the origins of modern economic growth and the Great Divergence one increasingly finds references to the role of institutions, including the state. Marjolein 't Hart in her review is clearly critical about the way their role has been discussed up until now, by those scholars whose work I analyse as well as by me. I am somewhat in a predicament here because I have just published *State, economy and the Great Divergence. Great Britain and China, 1680s to 1850s* in which I discuss many of the topics she addresses in her review. It is not much use to extensively discuss her critique of Acemoglu and Robinson. One can only wonder why their *Why nations fail* has received such exuberant praise. The emphasis on property

11 See H. Floris Cohen, *How modern science came into the world. Four civilizations, one 17th century breakthrough* (Amsterdam 2012) in which the author sets out - and I think manages - to explain via an extensive comparative analysis how and why modern science first came about in early modern Europe rather than in Ancient Greece, China or the Islamic world and idem, 'The rise of modern science as a fundamental pre-condition for the Industrial Revolution', *Österreichische Zeitschrift für Geschichtswissenschaften* 20, 2 (2009) 107-132.



Maudslay marine engine, International Exhibition, London 1862

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rights in their and many other institutionalists' texts also is not singularly helpful when it comes to explaining modern economic growth. (See for my extensive comments *EP*, 323-332 and *SEGD*, 64-67) I fully endorse 't Hart's critical remarks in these respects.¹²

't Hart then goes on to criticise explanations that focus on the fiscal-military state and mercantilism as typically European or rather British. In her view it would be incorrect to deny that China too had a fiscal-military state. In her – and in Goldstone's – view many scholars, including me, tend to overestimate differences between Great Britain and China. Here we disagree. I do think differences were major and I consider the functioning of the Chinese state as far more problematic than 't Hart does when she describes it as meritocratic, bureaucratic and well-functioning. She does so referring to publications by Peter Perdue and in particular Roy Bin Wong. The work of Wong, however, as I show extensively in my *SEGD*, is really a

12 See my 'Does wealth entirely depend on inclusive institutions and pluralist politics? A review of Daron Acemoglu and James A. Robinson, *Why nations fail. The origins of power, prosperity and poverty*', *Tijdschrift voor Sociale en Economische Geschiedenis* 9, 3 (2012) 74-93.

bad guide if one wants to compare state-formation and state policies of Great Britain and China.

Let us again focus on these two countries. 't Hart objects to my use of the 'British model' of the fiscal-military state. I fail to see what would be wrong with that. Great Britain was the first country that took off into modern economic growth. For a couple of decades it was the only major industrial country. I therefore also see no reason why we would have to clean concepts like 'inclusive institutions', 'fiscal-military state' or 'mercantilism' from what she calls 'the most rapacious Anglocentrism'. An analysis of the origins of modern economic growth cannot avoid a substantial amount of Anglocentrism.

To show that China's state functioned quite well, 't Hart points out that its budgets had 'massive, regular surpluses, at least up until the late 1790s.' Actually those surpluses boil down to rather small amounts of money. They ended up as reserves in the Treasury in Peking. Those reserves in their entirety never amounted to more than 70 million taels, which equalled some 9 grams of silver per Chinese at a time when an average Chinese wage labourer – who tended to be on a very low income as compared to most of his compatriots – earned the equivalent of some 2-3 grams of silver per day. More importantly: these surpluses were the consequence of very low expenditures, not high revenues. This is not the place to go into detail but as I show extensively in my *SEGD*, the amount of revenue at the disposal of central government in Qing China as compared to central government in Great Britain was extremely low. It was only a fraction in nominal as well as in real terms and, on top of that, tended to decrease over time. Qing China's tax system, as well as its financial and monetary systems, were more primitive than those of Great Britain and they all increasingly went into disarray. I fully endorse Perkins' claim that for promoting economic development, in my view already from the last decades of the eighteenth century onwards, '... the Chinese government was an almost unbelievably weak instrument.'¹³ When it comes to China's military, 't Hart again points at resemblances between China and Great Britain. According to her 'Recent research shows that East Asia was involved in a military revolution too, which did result in the application of innovative arms and tactics with linkages to taxation and state-formation.' And again, as I extensively show in my *State, the economy and the Great Divergence*, this is revisionism pushed way too far. In quantitative as well as qualitative

13 Dwight Perkins, 'Government as an obstacle to industrialization: the case of nineteenth-century China', *The Journal of Economic History* 27 (1967) 478-492, 492.

terms China's military clearly was far less developed than that of Great Britain.

Next 't Hart addresses mercantilism: in her eyes 'a true zombie in view of its repeated burials'. Much of course here depends on how it is defined. 't Hart quotes me as defining it as 'measures meant to support the national economy'. In my book, though, that is followed by 'primarily on behalf of the state.' (*EP*, 371) That is fundamental. I explicitly describe mercantilism as a form of economic nationalism. It is not simply an obsession with bullion or a form of rent seeking. As practiced in Great Britain it consisted of a massive number of measures to protect the nation's economy by, for example, Navigation Acts, tariffs, banns, bounties, drawbacks, or the disciplining of labour. I extensively discuss these policies and their *potentially* positive effects on the economy in *EP* and do so even more extensively in my *SEGD*. There is nothing similar in Qing China in scope, scale and intensity. Qing China's rulers did not set out to strengthen the national economy and the state. Their paternalist 'social' policies were fundamentally different from the aggressive 'economic' policies of Great Britain's government. I emphasize 'aggressive' as none of the texts that point at mercantilism's potentially positive effects for economic growth give a 'benevolent interpretation' of it, as 't Hart apparently fears. In contrast to her I see no clear indication that mercantilist policies would be declining before, at the earliest, the 1820s. In this context it is interesting that an increasing number of scholars e.g. Giovanni Arrighi, Ronald Findlay and Kevin O'Rourke, Patrick O'Brien, N.A.M. Rodger, and also Marjolein 't Hart herself, has recently started to study the possible *beneficial* effects on the economy of the use of violence and of warfare.¹⁴

I am not claiming mercantilism would be the cause of modern economic growth but consider it highly probable it contributed to it and would certainly not simply describe it as a historiographical 'zombie'. Many recent publications actually refer to mercantilist policies as very important in explaining Britain's (modern) growth. I only refer to work by William Ashworth, Ronald Findlay and Kevin O'Rourke, Patrick O'Brien, David Ormrod, Prasannan Parthasarathi, or N.A.M Rodger. Several economists and social scientists too have come up with more positive evaluations of it, e.g. Ha-

14 For references see the bibliographies of *EP* and *SEGD*. For Marjolein 't Hart's approach see her, *The Dutch Wars of Independence. Warfare and commerce in the Netherlands, 1570-1680* (London and New York 2014).

joon Chang, Erik and Sophus Reinert, Linda Weiss and John Hobson. The debate on mercantilism and economic growth is far from over.¹⁵

Talking about mercantilism means talking about the state. According to 't Hart, however, overall, the impact of the early modern central state on the economy would have been limited. For Great Britain, I find that hard to believe. I only refer the reader to graph 10 and table 51 of *EP*, and to my analysis in *SEGD*. The state was by far the biggest consumer, producer, borrower and employer in Great Britain. It collected and spent enormous sums of money and built up an enormous public debt. It permanently interfered in production and in particular in trade. It took care of physical protection of trade. It had a huge navy and army. It waged many wars and played a central role in empire building. It backed up the existing monetary and financial systems. It intervened in the labour market, set the standards for poor relief and made laws. In many respects Great Britain's strong interventionist central state emerged only halfway the eighteenth century but so did 'industry'. I see a clear connection between the rise of Britain's territorial, 'Weberian' state, its nationalism and its growth. In this respect I see many similarities in my approach and that of Sven Beckert in his *Empire of cotton. A new history of global capitalism*, that appeared after I finished my two books. It time and again emphasizes how big the role of the state i.e. its interventions and manipulations and its use of coercion and violence, were – from the very beginning – in causing the deep global gap between wealthy and poor societies.¹⁶

7 Methodological comments

De Vries refers to two methodological innovations on which many Californian arguments rest and that I would tend to neglect: reciprocal comparison and institutional equivalence. My answer would be that actually I too use reciprocal comparisons in the sense that I systematically compare

15 For references see the bibliographies of *EP* and *SEGD*. For very recent literature devoted to rethinking mercantilism see in chronological order, *The William and Mary Quarterly*, 69, 1 (2012) 3-70; Philip J. Stern, and Carl Wennerlind, eds., *Mercantilism reimaged. Political economy in early modern Britain and its empire* (Oxford and New York 2013) and Moritz Isenmann, ed., *Merkantilismus. Wiederaufnahme einer Debatte* (Stuttgart 2014). Forthcoming at Routledge is Philipp Robinson Rössner, ed., *Economic reason of state: Reconfiguring the origins of modern political economy*.

16 Sven Beckert, *Empire of cotton. A new history of global capitalism* (New York 2014) passim. For several quite telling quotes amongst many, see e.g. pages 31, 37, 47, 55, 78, 95, 142, 155-174 and 182.

what I find in my cases (the West, especially Great Britain, and the rest, especially China) with one another *in the light of* certain theoretical claims. When it comes to institutional equivalence as implemented by Wong and Rosenthal in their *Before and beyond divergence* that only tells us that China at least according to their view was about as rich as the West before the Great Divergence with different institutions, which I do not consider impossible although I do not think it actually was the case. Whether China can again become as wealthy as the West with substantially different institutions is something only the future can tell. When it comes to ‘the Great Divergence literature’s strategic invocations of environmental history’ I, in contrast to what De Vries claims, *do* address them. Point is that I do not endorse Pomeranz’s claim that both the West and China were locked in a Malthusian crisis. I do not believe that Great Britain, let alone Europe, at the end of the eighteenth century, was as Jones puts it in his review of my *Escaping poverty*, ‘treading water, reaching ecological limits, running up against resource constraints’. (See *EP*, 66-79). Nor do I believe that the West solved its Malthusian predicament via ghost acreages (See *EP*, 290-305).

Jones makes a number of methodological comments. He certainly has a point when he criticises my *seriatim* approach. Just like him I do not believe in mono-causal claims but to show that I am justified in doing so I first had to present and refute them in order to then make way for new hypotheses and more complex explanations. When it comes to his critique that I would hold authors to account for opinions they may have since amended, I can only say that I do not so much hold people to account as wanted to show what opinions have actually been held and what I think of them. I know people can and sometimes do change their mind. By far his most important critique deals with the lack of sufficient sensitivity to regional investigations. We find that same plea for other levels than the state-level in the text by ‘t Hart: ‘... early modern economic development was a strongly localized phenomenon.’ In my view industrialization in the strict sense of ‘the rise of the factory’ may well have originated locally and can even have stayed local. Modern economic growth, however, in my view normally involves a much broader process. A couple of industrialized regions as such do not normally lift up the national economy. Besides, what happens in regions overall can only be understood in a national and at times even broader context. Would Lancashire have industrialised if it had been located in another country? But nevertheless, more detailed, regional analyses with more attention to local synergies would certainly be welcome and I would certainly try to integrate their findings in a new version

of *Escaping poverty*. 't Hart thinks that in this context local emulation was 'much more important as a driving force for economic development than national emulation.' That may well have been the case in many instances in European economic history, but what is 'local emulation' in Great Britain in the period under discussion in my book? What is 'local political power', another concept 't Hart refers to in that context? Nowhere in Europe was the economy more 'national' than in Great Britain where control of economic life was in the hands of the state not of cities, provinces, or regions.¹⁷ When 't Hart pleads for more attention to cities as centres of innovation and studies on the effects of urbanization and local networks, or the lack thereof, I can of course not object. (See for some comments *EP* under urbanization plus pages 93 and 187).

Let me conclude with a fundamental methodological comment by Parthasarathi. According to him global history has shied away from intense archival research, and he suggests '... we must ask if we have reached a limit of what can be achieved in this way and ask if the global turn needs to bring in archival research ...' I confine myself to two comments: firstly the amount of secondary sources based on archival research is growing so explosively that to just keep up with it has become (more than) a full-time job. If global historians want to be 'broad', i.e. synthesize, compare and connect information concerning different parts of the world, secondary work will almost by definition normally provide the bulk of their information. Secondly, this of course does not and should not exclude the possibility of team-work in projects in which asking big questions is systematically combined with doing detailed empirical research.

8 Final comment

The debates about the Great Divergence of Great Britain and China were at the root of my book on modern economic growth. Having finished it, I can only agree with Jones that *for solving the riddle of the origins of modern economic growth* the Great Britain or North-western Europe / China comparisons that constantly pop up in Great-Divergence debates are not very helpful. I already *suspected* this for quite some time but after finishing my two latest books I *know* it. All those comparisons one way or another

¹⁷ See e.g. Fernand Braudel, *Civilization & capitalism, 15th-18th century. Volume III, The perspective of the world* (London 1984) chapter four and Mark Dincecco, *Political transformations and public finances. Europe, 1650-1913* (Cambridge 2011) tables 2.1 and 2.3.

assumed 'striking resemblances' or wanted to discuss them. Point is that those resemblances do not exist: Qing China was so different from Great Britain (and to a lesser extent most of Europe) that looking at its history will certainly not enable us to understand in any depth why modern economic growth emerged in Great Britain. More in general a comparison of 'East' and 'West' – interesting and relevant as it definitely is – will not contribute anything substantial to explaining why the West had the first modern economies in the world, although it does help in explaining why the East didn't. We ought to be extremely grateful to the California School for starting a fascinating debate but at the same time acknowledge that decreasing returns have set in. Comparative global economic history is a fascinating and relevant field of study that has my full support but if we want to find the origins of modern economic growth – that entailed the Great Divergence – we will have to in depth study those places where it actually emerged rather than comparing them with completely different places. My next book will certainly be about a different topic but I would be thrilled if it would get the same reviewers.

About the author

Peer Vries studied economic and social history at the university of Leiden, where he has also taught for many years. He currently is professor for global economic history, with an emphasis on the early modern period, at Vienna University. Over the last twenty year he has extensively published on 'the rise of the West' and the Great Divergence as shows in his list of publications. He was one of the founders of the Global Economic History Network and of the *Journal of Global History*. His most recent major publication is *State, economy and the Great Divergence. Great Britain and China, 1680s to 1850s* (Bloomsbury, 2015). See: <http://wirtges.univie.ac.at/Wiso/Vries/Viennaweb.pdf>. E-mail: peer.vries@univie.ac.at