
Debating the Balkan Potential for Pre-1914 Development

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Controversy is part of the practice of economic history. Statistical uncertainties and competing theories about how modern development has occurred make argument inevitable. Two patterns for controversy seem relevant here. One finds the dissenter using greater statistical detail and precision to question another scholar's framework for explaining how change did or did not take place in a particular economy. Inquiries by David Good and Richard Rudolph into the applicability of the Gerschenkron hypothesis about banking and belated development come readily to mind.¹ A second, less constructive pattern may be found in some of the criticism directed against the seminal work by Robert Fogel and Stanley Engerman, *Time on the Cross*. A variety of dissenters have attempted to discredit the authors' economic analysis of Southern slavery by calling into question the integrity of Fogel and Engerman's data. They then present separate quantitative evidence for the behaviour of other variables than those the authors have emphasized but do not explain how these other indicators yield a more convincing overall view of the slave economy of the American South.

The largest part of Michael Palairt's indictment of my early work unfortunately follows this second line of attack. I regret having to take the reader's time to address questions of statistical integrity. A previous publication

¹ DAVID F. GOOD, "Backwardness and the Role of Banking in Nineteenth-Century European Industrialization", *The Journal of Economic History*, XXXIII, 4 (Dec., 1973), pp. 845-50; RICHARD RUDOLPH, *Banking and Industrialization in Austria-Hungary. The Role of Banks in the Industrialization of the Czech Crown Lands, 1873-1914* (Cambridge: Cambridge University Press, 1976).

(uncited by Palairet except in one footnote) and a book and forthcoming journal article have provided or will provide the detail whose absence Palairet evidently takes to be either sloppy scholarship or a disposition to "force questionable conclusions" from the data. I do not, however, regret the opportunity to discuss some wider areas of disagreement about the Balkan potential for modern economic development that divide us. Such a public exchange will hopefully prove fruitful.

Let me begin with some discussion of words rather than numbers, specifically two words that I used to characterize Balkan industry generally during the last decade before the First World War. I have written of a "mini-spurt" of industrialization and called it "unsuccessful." I coined the phrase "mini-spurt" to emphasize the absence of sufficient structural change, i.e. absorbing factors of production from the rest of the economy, to turn growth into development by making a spurt self-sustaining and extending it for several decades.² Although not arguing, as Palairet states, that these mini-spurts were "running out of steam" before 1914, I did suggest that, had war not intervened, slow structural change would not have accelerated. The prewar economic setting simply attracted too many of the factors of market production to unprocessed agricultural exports, vulnerable to bad harvests at home or fluctuating prices abroad. Rising international prices after 1900 only added to the attraction for domestic capital and failed to bring in much foreign capital for productive investment, as opposed to government loans. Balkan private industry faced the added prospect, had prewar conditions persisted, of paying higher wages in the face of rising food prices (see Table 7 of my JEH article) as well as a growing labour movement.

My argument then proceeds to the notion that the strategy of import substitution undeniably pursued by the bulk of Balkan manufacturing was a dead-end for sustained industrial development not only because of scarce capital and expensive labour but also because of the small size of domestic markets. Palairet does not dispute the limited numbers or lagging growth of urban population. He admits the "low consuming power of the peasants" and fails to show that their propensity to buy clothing and footwear favoured modern rather than craft production.³ The restricted domestic market for other leading manufactures like sugar and flour is confirmed by business complaints about excess capacity and the attempted formation of sales cartels, as noted

² The most widely accepted definition of development and application to the pre-1914 period comes from SIMON KUZNETS, *Modern Economic Growth* (New Haven: Yale University Press, 1966), pp. 490-99.

³ It may be noted that Palairet virtually concludes his excellent article "Fiscal Pressure and Peasant Impoverishment in Serbia", *The Journal of Economic History*, XXXIX, 3 (Sept., 1979), pp. 719-40, with support for the notion that "the peasantry were only intermittently in the market for exchange goods, and urban consumption per capita may have been 10 or 20 times that of the peasants".

for Romania in my JEH article. The only alternative strategy feasible at the time was to expand industrial exports. The high 43 percent share of Serbian exports which, Palairet stresses, were manufactured in 1911 derived from sudden growth in meat-packing that accounted for almost half of that percentage. This growth, although a major element in my argument for the advantage of large-scale Serbian industry over prewar Bulgaria's did not show signs of continuing the rapid advance begun by the 1906-11 tariff war with Austria-Hungary, which cut off Serbian livestock exports there. The Bulgarian textile exports touted by Palairet amounted to barely 3 percent of total export value in 1911, leaving unprocessed grain to account for over two thirds of that total.⁴

While standing by my notion of Balkan "mini-spurts," let me nonetheless admit to some second thoughts of long-standing about the adjective "unsuccessful." It was inserted into my 1975 JEH article on pre-1914 Balkan industry precisely to indicate something better than "failure," a word which never appears in the article, contrary to Palairet's inferences, but also something worse than "belated," which suggests the start of sustained industrial development. The prewar growth that did occur lies further away from failure than "unsuccessful" suggests and "laid the groundwork for an alternative approach to economic development later in the XXth century," based on industry rather than unprocessed agricultural exports. Hence my decision to omit "unsuccessful" from the chapter on pre-1914 industry in my now published book on Balkan economic history, co-authored with Marvin R. Jackson, and to conclude that chapter with the last cited phrase.⁵ I hasten to add that this groundwork did not lead to rapid resumption of prewar growth rates, especially for Serbia, after the First World War which Palairet posits. He sees the war as a brief "interruption to a long economic uprising which only petered out during the slump," i.e., the 1930's. Let me take a closer look at his statistical evidence for the period 1912-29, before turning to a defence of my own data for the prewar period.

For Serbia, Palairet's evidence is open to serious criticism. His citation of an impressive 30 million dinar rise in fixed industrial capital during 1912-13, from a 1910 total of 62 million, overlooks 1911 and also his own source's inclusion of short-term credit in the 1912-13 increment. Elsewhere, this Industrial Chamber report indicates that fixed capital rose by only 18 million dinars during these two years.⁶ Over half of that amount went to the open-

⁴ KIRIL POPOFF, *La Bulgarie économique, 1879-1911* (Paris, 1920), p. 404.

⁵ Chapter 8 in JOHN R. LAMPE and MARVIN R. JACKSON, *Balkan Economic History, 1550-1959: From Imperial Borderlands to Developing Nations* (Bloomington, Ind.: Indiana University Press, 1982).

⁶ *Industrijska Komora Kr. Srbije, Izveštaj, 1912-13* (Report, 1912-13) (Belgrade, 1914), p. 76.

ing of two Czech-backed sugar refineries whose output would be confined to the domestic market. Although the newly acquired Macedonian lands increased the size of that market, their annexation in 1913 did not begin generating either the foreign or domestic investment there that would have been required to raise its purchasing power and to generate a Greater Serbian take-off. Neither could industrial employment have risen much, despite the lack of 1912-14 figures, because of the demands of military mobilisation for two Balkan wars and the Macedonian occupation.

More clearly incorrect are Paláiret's assertions that Serbian war damage was "speedily made good after 1918" and industrial growth resumed at a prewar pace. Belgrade's bridge across the Sava River was not rebuilt until 1920, and the railway line south to Niš could not resume normal service much earlier. Even then, coal remained scarce for industry as well as rail traffic. Compounding these initial problems and persisting through the 1920's was a shortage of industrial capital from the Belgrade banks, the main prewar supplier, and little Western European investment or Central European reparations.⁷ Neither of the two came in expected amounts. Little wonder that Croatian and Slovenian industry grew more rapidly than their Serbian counterpart during this decade. Croatian meat-packing for instance, drew on far more bank credit and a closer location to the Central European market to expand exports that had already been larger than Serbia's before the war.⁸ Paláiret's reference to a 61 percent rise in the number Serbian industrial enterprises between 1910 and 1926 fails to note that the figure for 1926 includes Macedonian enterprises as well.⁹ Even then, this combined number was less than 20 percent of the Yugoslav total and under the low Yugoslav average for horsepower and employees per firm.¹⁰ Growth of annual production is of course a far better indicator of industrial activity, and we have no usable postwar data for Yugoslavia until 1923. The only indicator we have for growth from 1918 to 1923 is Kukoleča's calculation of the increase in industrial horsepower and employment in the Belgrade area, the centre of Serbian manufacturing.

⁷ See JOHN R. LAMPE, "Unifying the Yugoslav Economy, 1918-1921: Misery and Early Misunderstandings", in *The Creation of Yugoslavia, 1914-1918*, ed. by Dimitrije Djordjević (Santa Barbara, Calif.: Clio Books, 1980), pp. 139-56, and also Danica Milić, "Privreda Srbije i odnosi u njoj 1919 godine" (The Economy of Serbia and its Inner Relations, 1919), *Acta historico-oeconomica iugoslaviae*, 7 (Zagreb, 1980), pp. 45-54.

⁸ See Chapter 9-11 of LAMPE and JACKSON, *Balkan Economic History*.

⁹ His source, N. POPOVIĆ and D. MIŠIĆ, *Naša domaća privreda* (Our Domestic Economy) (Belgrade, 1929), p. 326, gives virtually the same number of enterprises for 1910 (470) as the Industrial Chamber cited for Serbia alone in Table I of its report for that year (464) but states that its figures for both 1910 and 1926 come from the reports of the Belgrade and Skopje Industrial Chambers. The inference that the much larger later figure included total enterprises in Serbia and Macedonia combined is clear.

¹⁰ See Table 11.12 in LAMPE and JACKSON, *Balkan Economic History*.

That rate of growth was the lowest in Yugoslavia except for Macedonia and the fractions of Yugoslav horsepower and employment, just 5.4 and 9.5 percent respectively, versus over 60 percent for Croatia and Slovenia combined.¹¹ Such disparity suggests that Serbia failed to match both the modest overall Yugoslav growth of 30 percent in net national income per capita for 1909-29, calculated by Vinski and cited by Palairet, and also Vinski's 27 percent rise in real per capita production of manufacturing and mining for 1922-29.¹² The latter figure yields an annual growth rate, in any case, of 4 percent versus the 1901-11 figure of 10 percent.

For Bulgaria, the record of industrial growth is better, especially for the 1922-29 period, but for reasons that do not support Palairet's favourable view of the pre-1914 pattern of development. The period 1911-21 saw real industrial output rise annually by 5 percent, well under the 14.7 percent recorded for 1904-11.¹³ Booming cement and tobacco production led the way but during the last wartime years and under German auspices and exploitation.¹⁴ Growth rates for the rest of the 1920's admittedly averaged nearly 15 percent. Yet this second Bulgarian mini-spurt derived from an influx of foreign bank credit missing before the war, and still more from the shock that low world prices and tougher foreign competition administered first to the old reliance on wheat exports and then in 1925-26 to a new reliance on tobacco sales.¹⁵ It was in other words the collapse of the prewar possibility to rely on unprocessed agricultural exports that attracted domestic and foreign capital into postwar Bulgarian industry with such striking results.

Palairet admits the relative disadvantage of prewar Bulgarian industry compared to Serbia's when we compare the per capita production of mechanically-powered, large-scale enterprises. His own figure for nominal Serbian output in 1911 is 126 million dinars, drawn from a Chamber of Industry report that includes 23 millions worth of prunes and jam, always excluded from official Serbian statistics and my industrial calculations, but that leaves out some mining and state monopoly production.¹⁶ My own figure of 115 million dinars for 1911 Serbian output, in Table I of my *Southeastern Europe* article, thus appears to approximate this adjusted Chamber estimate. And so it should, because I used it in constructing my Serbian industrial data for 1898-1911 far more clearly and carefully than Palairet's presentation would suggest. Let me trouble the

¹¹ STEVAN KUKOLEČA, *Industrija Jugoslavije, 1918-1939* (Belgrade, 1941), pp. 107-9.

¹² Table 10.5 in LAMPE and JACKSON, *Balkan Economic History*.

¹³ *Ibid.*

¹⁴ For details of this economic exploitation, see VERA KATSARKOVA, "Ograbvanito na Bulgariia ot germanskii imperiazim" (The Exploitation of Bulgaria By German Imperialism), *Trudove na V. I. I. Karl Marx*, II (Sofia, 1969), pp. 164-223.

¹⁵ See Chapter 11 of LAMPE and JACKSON, *Balkan Economic History*.

¹⁶ Industrijska Komora Kr. Srbije, *Izveštaj, 1911* (Report, 1911) (Belgrade, 1912), p. 16.

reader with spelling out the steps involved and also their notation in the two articles under attack. The nominal figure of 115 million dinars for 1911 derives quite simply from the reflation of my 1911 estimate of *real* industrial output, taken from my doctoral dissertation and published with all sources and procedures included in the Cameron chapter, pp. 125-26, and then reduced by state monopoly output, as footnoted in *Southeastern Europe's* Table I, because of unreliable estimates of state capital. The reflations follow the sectoral percentages of post-1904 inflation spelled out in the Cameron Table V.1 and raise 1911 milling output from 20 to 27 million dinars, other private manufacturing from 51 to 66 and mining from 14 to 16, while cutting brewing 8 to 5, to equal 115 million. The 1911 figure of 95 million dinars for private industry *without* mining that appears in Table 1 of my *Journal of Economic History* article follows when we subtract 16 million for mining and another 4 million for a lower reflation of flour from 115 million. How anyone could find that these two totals "cannot be recalculated from the source information" escapes their author. Reflating real output and deducting mining and state monopoly production are hardly complex procedures.

My Bulgarian industrial data for 1911 is still more straightforward. Kiril Popoff did not merely "use the publications of the Bulgarian state statistical bureau", as Palaret tells us, but was rather its respected director before and after the First World War. Present-day Marxist scholars in Sofia continue to respect his work for its scrupulous and unbiased calculations. His estimate of 123 million leva in 1911 industrial output made after the war adds only 3 million leva in electrical power and 3 million in food production to the official figures of the 1911-12 statistical yearbook. I therefore used 123 million in my *Southeastern Europe* article, written before the JEH piece, and referred the few SEE readers oriented to economic historiography to a published discussion of pre-1914 Bulgarian statistical sources that also, not surprisingly, listed them all.¹⁷ The figure of 112 million subsequently used in Table 1 of my JEH article reflects only the specified deduction of 4.5 million leva in state and private mining output and also another 3.4 million in state production, plus Professor Jackson's desire as co-author of this Table 1 to use the slightly lower 1911-12 yearbook total and to add 5 percent for undercounting.¹⁸

Nor do my data for the base years of 1901 and 1904 for real Serbian and Bulgarian industrial production, used in my JEH Table 2 to calculate growth

¹⁷ ZHAK NATAN et al., *Ikonomika na Bulgariia*, I (Sofia, 1969), pp. 372-73. For corroboration of these calculations, see POPOFF, *La Bulgarie économique*, pp. 326-28.

¹⁸ *Statisticheski godishnik na Bulgarskoto Tsarstvo, 1911-12* (Sofia, 1913), pp. 207-11. The sources for Table 1 in my JEH article refer the reader to these and other adjustments as spelled out in MARVIN R. JACKSON, "Quantitative Economic History in the Balkans: Observations of the Period before 1914", *Faculty Working Paper in Economics* EC 74-39 (Tempe, Arizona: Arizona State University, 1974), p. 2.

rates to 1911, generate the imprecision to which Palairret alludes. The Serbian figure for large-scale private industry in 1901 is 26 million dinars, simply the the 39 million dinar total in my Cameron chapter, Table V. 1, minus the 13 million in mining and state production listed there. The Bulgarian figure of 33 million leva for 1904 comes from the careful but unofficial Iurdanov estimate, listed in my SEE Table I source, minus 1.4 million for mining and plus an equal amount for undercounting.¹⁹ The resulting annual rates of geometric growth are 11.6 percent for Serbia and 14.7 percent for Bulgaria, slightly different than the 12.5 and 14.3 percent calculated by Professor Jackson in the JEH Table because imprecise log tables were used there instead of an electronic calculator. Readers are invited to draw their own calculators from their holsters and fire logs and antilogs at the figures 28 and 78 for Serbia 1901-11 (from the Cameron chapter, Table V. 1) and 33 and 86 (112 million reduced by 30 percent inflation) for Bulgaria 1904-11. Anyone hitting Palairret's first page targets of 17.9 percent for Serbia (instead of 11.6) and 16.2 percent for Bulgaria (instead of 14.7) should check for a malfunction or a mistake.

One mistake does admittedly appear in Table 2 of my JEH article. Annual rates of population growth for Serbia and Bulgaria during this decade were indeed 1.5 percent each, not 1.9 and .5 as printed. The typographical origin of this error may however be seen in the fact that the correct population rates were used in the table's per capita figures for real industrial growth. Electronically calculated they turn out to be 10 percent for Serbia and 13 percent for Bulgaria, versus the JEH percentages of 10.5 and 12.7.

Let us turn from these tedious yet ample justifications for and insignificant changes in the results of my industrial research to two wider questions that Palairret's article does usefully raise. How does one best define "industry" in the pre-1914 Balkan states? How does one best calculate the contribution of agriculture to the pre-1914 potential for economic development?

The problem with industry is of course what to do with small-scale, unmechanized artisan and rural production of literally hand-made goods. All of my published articles and the lengthy survey, *Balkan Economic History, 1550-1950*, argue that such production provides so little capital, labour or entrepreneurship upon which modern industry actually draws that it should be omitted from any developmental definition of that sector. Craft production simply does not "take-off" anywhere in 20th century Europe. Hence my failure to make any use of the figures listed for "small-scale private industry" in my JEH Table 1. The brief references in Palairret's present paper to proto-industrialization convince me neither that he understands the precise way in which Franklin Mendels, its author, uses this phrase nor that Balkan craft production

¹⁹ I. IURDANOV, "Purvobroiavane na industrite" (An Initial Census of Industry), *Spisanie na bulgarskoto ikonomichesko druzhestvo*, X (Sofia, 1906), 5, pp. 395-429, 6, pp. 412-43.

made a significant contribution to modernization of enterprises or their work force.²⁰

I nonetheless join Palairé in suspecting that my JEH figures for small-scale industrial output overstate its 1911 value. The Serbian figure has therefore been reduced from 116 to 46 million dinars in the forthcoming survey volume. This reduction eliminates rural household production, hard even to estimate and mostly consumed outside the market. The minimum Bulgarian total for artisan shop production would seem to be the 60 million leva of 1911 artisan income cited on p. 323 of the Kiril Popoff volume. Professor Jackson used the Popoff estimate on p. 515 that all Bulgarian manufacturing produced 200 million leva in 1911, with large-scale output amounting to 123 million and, by implication, small-scale to 77 million leva.²¹

The question of agricultural statistics and dynamics brings us onto Palairé's home ground. Both his doctoral dissertation and his two articles have made a major contribution to our understanding of pre-1914 Serbian agriculture. I join him in questioning the precision of the 1913 estimates of the Serbian committee in Geneva, constructed in 1918 and undoubtedly inflated for the estimates of prewar *wealth* that were used to boost reparation demands. The common sources for Tables 1 and 2 in my JEH article also offer a caveat, apparently unnoticed by Palairé, to the *income* data used therein by referring the reader to Professor Jackson's "further discussion of Balkan data problems" in a published paper.

But on closer inspection, the Serbian committee's estimates for agricultural income hold up much better than Palairé would lead us to believe. The agricultural total of 590 million dinars may be reduced by 100 million to exclude hay and straw, according to their 1905 proportions, and thus match a similar

²⁰ See FRANKLIN MENDELS, "Proto-industrialization: The First Phase of the Process of Industrialization", *The Journal of Economic History*, XXXII, I (March, 1972), pp. 241-61, and also his "Social Mobility and the Phases of Industrialization" in *Industrialization and Urbanization*, ed. by Theodore K. Rabb and Robert I. Rorberg (Princeton, N.J.: Princeton University Press, 1981), pp. 59-82, for discussion of the indirect role that rural craft industry sometimes played in Western European industrialization.

²¹ The last figures has been reduced to 77 million leva in LAMPE and JACKSON, *Balkan Economic History*, Table 6.1, to reflect the subtraction of Popoff's 123 million (rather than the Bulgarian statistical yearbook's 112 million) from Popoff's 200 million leva industrial total.

²² JACKSON, "Quantitative Economic History". For the more searching discussion that Balkan data problems do very much deserve, see MARVIN R. JACKSON and JOHN R. LAMPE, "The Evidence of Industrial Growth in Southeastern Europe" *East European Quarterly*, XVI (1983), pp. 385-415, and MARVIN R. JACKSON, "Agricultural Output in Southeastern Europe, 1910-1938" and "National Income and Product in Southeastern Europe before the Second World War", *ACES Bulletin*, 14 (Summer, 1982), and (Fall-Winter, 1982), in press.

exclusion for Bulgarian agriculture. The remaining 490 million dinars worth of field and vine crops, fruits, and forage does not outrageously exceed the total of 415 million that we obtain by taking the official Serbian yearbook values for these crops, *minus* forage, in 1905 of 220 million and multiplying this figure first by the 25 percent increase in grain output by 1912 that Palairet's own Appendix reflects and then by a minimum price increase of 50 percent by 1913.²³ Adding some rough estimate for forage would close much of that remaining gap.

Livestock output raises more difficult questions that are hardly resolved by Palairet's long presentation on the size of existing herds in the two countries. The value of these inventories belongs in the rightly doubted estimates of national wealth which interwar economists sometimes assembled. But herd size is not necessarily proportional to marketed value. For social product or national income, we need to know the annual sales of livestock and animal products. This is exactly what the Serbian committee purports to provide in its estimate for 1913 of 273 million dinars. Alas, this estimate also includes the annual growth of livestock inventories, 1-2 percent of the total in net terms but much more in gross. If we match this ambiguous total of 273 million with Popoff's Bulgarian listing of livestock and animal products sold in 1911, we find, as in my JEH article, per capita figures that favour Serbia, 91 to 48. This great discrepancy may well include upward bias in the Serbian data but how much is unclear.

Earlier and better Serbian yearbook data for 1905 furnishes only herd values. The Bulgarian per capita advantage in herd total is based on many more sheep and goats, with Serbia well ahead in hogs. About one third of Bulgaria's 1911 sales of livestock products did come from sheep but hardly any from goats, according to Popoff. How much the greater size and value of Serbia's hogs offset Bulgaria's sheep meat, wool and milk sales is hard to say.

More certain is the fact that neither of my early articles relied on these agricultural or livestock aggregates to make any argument, including the slightest reference to peasant standards of living. My line of reasoning revolved then and now around the relatively more balanced contribution and, if we include meat-packing, larger addition of Serbian agriculture to export earnings. Serbia lost its lead over Bulgaria in total export value per capita only during 1901-05, and then because of the unusually good Bulgarian wheat harvests that followed the disastrous ones of 1897-1900. For 1906-10, Serbia regained a 10 percent advantage, as Bulgaria's wheat production per capita turned downward.²⁵ This last turn jibes with Palairet's and my evidence of rising wheat average

²³ *Statistički godišnjak Kr. Srbije, 1905*, X (Belgrade, 1906), p. 254.

²⁴ Srpski Centralni Komitet, *Srbija u imovnom pogledu pre, za vreme i posle svetskog rata* (Serbian Wealth before, during, after the World War) (Geneva, 1918), p. 15; POPOFF, *La Bulgarie économique*, p. 227.

²⁵ LAMPE and JACKSON, *Balkan Economic History*, Tables 6.5 and 6.8.

per capita only if poorer land was now being cultivated. Hardly a prescription for developmental potential. For the earlier period of 1886-1900, it might be added, Serbian exports per capita exceed the Bulgarian by 23 percent. I did not ascribe this Bulgarian bad luck to the "relative weakness of its farming sector," as Palairret says, but rather, as the text of my SEE clearly states, to two more specific burdens. One was a growing overdependence on wheat exports and the other the huge debts facing the large number of Bulgarian peasants who had obtained their land from departed Ottoman owners and were forced to repay them in the 1880's. This burden combined with the difficulties of artisan industry, which now lost much of the Ottoman market and some of the domestic sales that I mistakenly argued in my SEE article had already occurred in the 1850's (see Chapter 5 of *Balkan Economic History, 1550-1950* for a revised view of the Bulgarian economy preceding liberation in 1878). In this last regard, we see the larger Bulgarian artisan sector which Palairret wishes to call industry revealed as an obstacle rather than a stimulus to modern industrial development.

My own work continues to identify capital and entrepreneurship as the cutting edge of what limited development did occur in the pre-1914 Balkan states. Stronger and more flexible native banks joined with less state and foreign interference to give Serbian industry a clear advantage over Bulgaria's. Palairret's valuable contribution in his present article is to show how higher wages and scarcer industrial labour in Sofia than in Belgrade also worked in the same direction. Yet Sofia's relative isolation from the rest of the country, in contrast to Belgrade, may have been more responsible than the lower density of rural population and higher demand for agricultural labor that Palairret suggests. In any event his case for elevating labour supply to a monocausal explanation remains "unproven" in the famous Scottish phrase. Palairret's present article does not even attempt to fit capital and entrepreneurship into developmental dynamics, let alone to recognize the pride of place that eminent economists from Marx to Hicks and Kuznets have given these factors of production. They also join in emphasizing the decisive role of modern industry, as opposed to craft production, in prompting sustained economic development. Beyond that, Palairret fails to undermine my major arguments because he does not successfully question the statistical foundation upon which they rest.