SAE./No.216/October 2022

Studies in Applied Economics

THE INFLUENCE OF ADAM SMITH AND ALLYN YOUNG ON LAUCHLIN CURRIE'S ADVISORY WORK IN COLOMBIA, 1949 - 93

Roger Sandilands

Johns Hopkins Institute for Applied Economics,
Global Health, and the Study of Business Enterprise

The influence of Adam Smith and Allyn Young on Lauchlin Currie's advisory work in Colombia, 1949-93

By Roger Sandilands

About the Series

The *Studies in Applied Economics* series is under the general direction of Prof. Steve H. Hanke, Founder and Co-Director of The Johns Hopkins Institute for Applied Economics, Global Health, and the Study of Business Enterprise (hanke@jhu.edu). The views expressed in each working paper are those of the authors and not necessarily those of the institutions that the authors are affiliated with.

About the Author

Roger SandiIands is emeritus professor of Economics at the University of Strathclyde (Glasgow) from where he obtained his PhD. He has been on the faculty there since 1971, but with extended periods of absence in Asia (including six years at the National University of Singapore) and Latin America (mainly Colombia where he worked on several extended occasions at the country's National Planning Department with the distinguished Harvard and New Deal economist Lauchlin Currie (1902-93). He is the author of The Life and Political Economy of Lauchlin Currie: New Dealer, Presidential Adviser, and Development Economist, Duke University Press, 1990).

The influence of Adam Smith and Allyn Young on Lauchlin Currie's advisory work in Colombia, 1949-93[1]

Roger Sandilands

This paper discusses the direct and indirect influence of Adam Smith in Latin America via the work of Lauchlin Currie (1902-93) in promoting the development of Colombia during 1949 – 1993. Currie was first exposed to Smith's work at the London School of Economic, 1922-25, under Edwin Cannan, editor of the 1904 edition of *The Wealth of Nations*. Then, at Harvard from 1925-28 Currie's great mentor was Allyn Young (1876-1929) whose presidential address to the British Association in 1928 on 'increasing returns and economic progress' paid tribute to Smith that would inspire Currie's later work in Latin America.

In 1927, Young had moved to the LSE on leave from Harvard but Currie kept in touch and in the summer of 1928 was in London in connection with his PhD work. There Young told him of his upcoming presidential address on the implications of Smith's aphorism that "the division of labour is limited by the size of the market." Sadly for Currie, Young died suddenly in London, March 1929, aged only 52, from pneumonia during a severe influenza epidemic.

John H Williams then became Currie's formal PhD supervisor.[2] His dissertation, 'Bank Assets and Banking Theory' (1931), evolved into his Harvard 1934 book on the supply and control of money in the United States (dedicated to Allyn Young's memory). This led to Jacob Viner recruiting him to his 'freshman brain trust' at the US Treasury for the summer of 1934, to prepare a blueprint (Currie 1934c) for reform of the Federal Reserve System.[3] He then moved to the Fed with its new chairman, Marriner Eccles, for whom he drafted the 1935 Banking Act that gave the Fed new powers for effective monetary control. In 1939, President Roosevelt appointed him his White House where he remained until FDR's death in April 1945. He then set up an economic consultancy firm in New York which led to his appointment in 1949 as head of the World Bank's first comprehensive country survey, to Colombia.

The influence of Adam Smith on Currie's thinking on money and growth

Smith's influence on Currie mainly related to (i) the forces behind the real wealth of nations as defined and determined by the market value of output; and (ii) money as the 'wheel of wealth', and the balance between the two. On economic growth, Currie embraced Smith and Young on specialisation, competition and mobility. On monetary theory, he also followed them on the importance of clear definitions of 'money 'and 'credit' and their distinct roles in the growth process.

[1] Presented at the International Adam Smith (IASS) conference, Bogotá, Colombia, 13 July 2022.

[2] Laidler & Sandilands (2002) and Alacevich et al. (2015) discuss Williams's connection with an influential January 1932 Harvard memorandum by Currie, Harry White and Paul Ellsworth calling for a radical fiscal and monetary program to combat rapidly worsening depression.

[3] Viner also recruited Currie's Harvard friend Harry Dexter White (1892-1948) who wrote his PhD under Frank Taussig. White stayed at the Treasury after completing his summer 1934 assignment, rising to Assistant Secretary in 1945 and was the driving force behind the creation of the IMF and World Bank. See Boughton (2021) on White's career that closely paralleled Currie's.

Young on Smith and his related influence on Currie.

Young (1928) considered Smith's aphorism on the division of labour limited by size of market as "one of the most illuminating and fruitful generalisations which can be found anywhere in the whole literature of economics." Smith gave the example of a pin factory. The larger the market for pins the more workers it pays to employ, but in more specialized ways, thereby greatly increasing their productivity.

Young's extension of Smith on this was that with the increase of *overall* market size it became progressively economic to establish new, more specialized firms. Thus vertical disintegration was as important a feature of modern industry as vertical integration or combination, with no necessary conflict between competition and optimal size of firms, except in special cases of natural monopoly. The more specialised firms would engage in increased trade with other firms, as well as selling to final consumers. This growing interdependence yields external economies that are intrinsic to economic efficiency.

Out of this, Young further extended Smith's insight into a theory of dynamic, self-sustaining '*increasing returns'*. Not only does specialisation depend on overall market size; overall size depends on specialisation, in a process of circular or cumulative causation.

Currie (1997) and Buchanan and Yoon (1999), define the progress that comes from Youngian increasing returns as, respectively, 'macroeconomic' and 'generalised' increasing returns. This differentiates it from Smith's (internal) '*economies of scale*', though Smith did recognise that increased specialisation was internal to each of the distinct *industries* as they grow.

Currie appreciated that increasing returns with cumulative causation involves a potential for *self-sustaining* growth rather than the self-exhausting growth in neo-classical models such as Solow's (1956, 1957). However, this depended on (i) the maintenance of competitive product markets, and (ii) factor markets facing minimal obstacles to labour and capital mobility, geographically, occupationally and sectorally. For, as Young (1929: 118-19) observed:

> [Smith] saw in commerce a means to welfare, not an end, and his book was, in effect, a formidable tract directed against mercantilism. Money, from the communal point of view, he held to be merely an instrument, a "wheel of trade". The real source of a country's wealth, he said, is its "annual labour", and its wealth could be increased only by making its labour more effective and by husbanding and accumulating the products of labour. The division of labour, i.e. the specialisation of tasks, is the principal factor in its effectiveness, and the degree in which the division of labour is practicable depends on the extent of the market. These were Adam Smith's fundamental principles. He elaborated them with extraordinary skill, always discussing concrete problems, showing unusual powers of fresh observation and use of illustrative material… Although the book is the most powerful brief ever formulated for unimpeded trade, neither hampered nor coddled by governments, its greatest importance is not to be found in that circumstance, but in the general picture, at once simple and comprehensive, which it gives of the economic life of a nation. The apparent chaos of competition, the welter of buying and selling, are resolved or transmuted into an orderly system of co-operation by means of which the community's wants are supplied and its wealth increased… Smith's real concern was for the establishing and maintaining of competitive conditions rather than for a vigorous observance by

governments of a hands-off policy… He was opposed to monopoly, to exclusive combination, to special privileges of all kinds, quite as much as to the type of legislation which aims at fostering a country's prosperity by restricting its trade. Often styled the "apostle of self-interest", he took no pains to conceal his dislike for some of the forms in which self-interest manifests itself in trade and industry.

In his LSE lectures, 1927-29,[4] Young downplayed the notion that an implication of Smith's thinking on the importance of size was defence of monopoly or protectionism. Young (*ibid.* p.54) told his students "there is no problem where there has been more loose thinking than in this of increasing returns… Large production, not large-scale production, permits increasing returns" (for the economy as a whole). However, he acknowledged that optimum firm size in any particular industry cannot be settled in general terms. The particular technical conditions in each industry determine whether firms will naturally morph into a larger or smaller number of more specialized firms. Specialisation is key, but in more complex forms than inside Smith's pin factory. The increasingly interdependent nexus of specialisation accompanies growth of national and international income in a cumulative way, with effects giving rise to new causation. Thus Young (1928, p.531) insisted that

> [T]he principal economies which manifest themselves in increasing returns are the economies of capitalistic or roundabout methods of production. These economies… are largely identical with the economies of the division of labour in its most important modern forms… [W]e may miss them if we try to make of *large-scale* production (in the sense of production by large firms or large industries), as contrasted with *large* production, any more than an incident in the general process by which increasing returns are secured… [T]he economies of roundabout methods, even more than the economies of other forms of the division of labour, depend on the extent of the market – and that, of course, is why we discuss them under the head of increasing returns. It would hardly be necessary to stress this point, if it were not that the economies of large-scale operations and of "mass-production" are often referred to as though they could be had for the taking, by means of a "rational" reorganisation of industry. If the overall size of the market does not warrant it, the non-market promotion of large firms and large industries may be the reverse of rational.

The point is that to be rational, change must go with the market, not against it; and timing and sequencing also matter. Young explains that with a larger overall market the increase in capital-intensive methods makes labour relatively scarce and therefore relatively productive:

> [T]he greater the degree in which labour is productive or scarce – the words have the same meaning – the greater the relative economy of using it in such indirect or roundabout ways as are technically advantageous, even though such procedure calls for larger advances of capital than simpler methods do. (ibid. p.532)

This then, is not a plea for artificially fostering labour-intensive, 'make-work' methods often advocated for countries with abundant cheap labour.[5] International labour mobility may be efficient from a world perspective but politically problematic nationally. Currie's advice to

[4] Nicholas Kaldor's student notes from these lectures were later published in Sandilands (1990a).

[5] Or, indeed, in high-wage countries where firms urge more immigration in face of 'shortages' at home. This may restrict 'increasing returns' by discouraging innovation. And labour-abundant countries may gain more from removal of barriers to their exports than from increased emigration.

Latin America was to accelerate the internal geographical and occupational mobility of low-paid, low-productivity workers to where they are relatively scarce, hence with higher productivity and wages. He asks whether there are restrictions on competition and mobility in national labour markets that make for both slow growth and unnecessary inequality.

As real costs and prices fall, so real demand increases, motivating and endogenously helping to finance further cost-reducing specialisations. Thus Currie (1981, 1983) extended Young on self-sustaining growth by noting an underlying tendency, absent exogenous shocks, for the *rate of growth* as well as growth itself to be self-sustaining. Dynamic disequilibrium through cumulative causation is characteristic and beneficent. Hence the concluding paragraph in Young's presidential address (1928, pp. 539-40):

> In recapitulation of these variations on a theme from Adam Smith there are three points to be stressed. First, the mechanism of increasing returns is not to be discerned adequately by observing the effects of variations in the size of an individual firm or of a particular industry, for the progressive division and specialisation of industries is an essential part of the process by which increasing returns are realised. What is required is that industrial operations be seen as an interrelated whole. Second, the securing of increasing returns depends upon the progressive division of labour, and the principal economies of the division of labour, in its modern forms, are the economies which are to be had by using labour in roundabout or indirect ways. Third, the division of labour depends upon the extent of the market, but the extent of the market also depends upon the division of labour. In this circumstance lies the possibility of economic progress, apart from the progress which comes as a result of the new knowledge which men are able to gain, whether in the pursuit of their economic or of their noneconomic interests.

This led Kaldor (1972) to stress the irrelevance of equilibrium economics.[6] There need be no tendency to diminishing returns and the classical 'stationary state'. His approach (as with Currie 1997 and Sandilands 2009) rejects the theoretical properties of the neo-classical Cobb-Douglas aggregate production function in which there are assumed to be constant returns to the overall size of the economy and diminishing returns, *ceteris paribus*, to each factor of production taken separately. Empirical estimates of the supposed 'contribution' of each factor as they grow, as measured by their respective income shares, often yield a large unexplained 'residual', variously known as "total factor-productivity growth", "technical progress" or "measure of our ignorance".

David Warsh (2006) discussed the emergence of modern endogenous growth theory to help explain this residual. Paul Romer (1986, for example) is Warsh's hero, but even he retains the neo-classical framework (see also Chandra 2022). Romer's main innovation is to explain the

[6] However, Kaldor (1966) also invoked "Verdoorn's law" in favouring manufacturing, believing it gives the greatest boost to labour productvity (see Chandra and Sandilands 2021). He insisted that early-stage industrialisation requires an agriultural surplus to supply cheap inputs for industry, together with tariffs against foreign competition. Unlike Young, he doubted agriculture's ability to meet the increased demand that comes with development. Thus he had a structural theory of inflation. Chandra (2020, pp.111-18) highlights the differences between Kaldor's and Currie's faith in market. In Young's theory, even though agriculture faces inelastic demand, it participates in increasing returns from overall economic growth that can motivate even more innovations in agriculture as in industry, as and when increased demand makes them pay. This was the point of Clapham's (1922) "empty economic boxes", and Young's (1913) criticism of Pigou on subsidies for "increasing-returns industries" and taxes on ones supposedly subject to decreasing returns. Chandra (2006) discusses Currie (1981) on this.

residual through the special nature of 'knowledge'. This is only partially and temporarily excludable, once in the public domain, and is also 'non-rivalrous' (in that its possession by one person does not deprive others of it – unlike, say, a car). It therefore becomes largely a free good but generates more growth than the private returns to conventional measures of labor and capital. However, by retaining the Cobb-Douglas framework that still underlies neo-classical endogenous growth models, they still fail fully to capture Young's more classical, Smith-based theory of endogenous 'increasing returns' that, as shown below, lies behind Currie's advice on growth policy for Colombia.

A digression on land and land rents in the growth process

However, first we highlight the implications of how both Solovian and Romer's growth models conflate land with man-made capital. David Ricardo (1772-1823), Smith's classical successor, saw land rent as a pure surplus over its own (zero) labor costs of production, the 'free gift of Nature', and distinct from profits specifically due to man-made capital. However, 'intra-marginal' land commands rent according to the degree by which, under competition, product-market prices (fixed by direct and indirect labor costs) exceed their costs at intra-marginal locations. So rent does not enter product prices; instead, it is the *consequence* of those prices as set at the margin where rents are close to zero.

This principle applies with greatest force in large cities, where rents far exceed those in agriculture because of agglomeration economies and greater social amenities. These all affect (differentially) the demand for land and, because land (but not the amenities) is fixed and immobile, the price and rent of land are entirely demand-driven. General taxpayers often bear a large part of the cost of the amenities, especially the big infrastructure costs. But it is the owners of land who gain 'unearned increments' from the resultant land values.

William Vickrey won his Nobel prize partly for demonstrating how land-value taxation could cover the losses that would otherwise accrue when the efficiency principle of marginal-cost pricing is applied on infrastructure where marginal use costs are low, or even zero.[7] To the extent that users are owners of land now 'earning' higher rents, they would pay higher land taxes. Users who rent their homes or businesses would also pay for the amenities' fixed costs through their rents, though the ultimate incidence of the tax falls on the owners.

If land taxes replace other taxes, taxpayers' *net* gains depend on the rent share of their total income. Also, the elimination of 'deadweight' losses associated with taxation of wages, profits and trade would, as Smith insisted, be an added stimulus to economic growth; and also to Youngian increasing returns.

The question then is whether the combined value of incomes from capital plus land is a good indicator of the main sources of growth. It is true that *for the individual*, land and/or its rent

[7] Vickrey (1955) gives the example of New York's metro. Bogota is currently (2022) building a metro at substantial cost to taxpayers. The resulting land values, especially if fares are based on marginal rather than average costs, justify "betterment levies" (or "*contribuciones de 'valorización'*) to cover fixed costs. This principle has been applied widely in Colombia (see Oscar Borrero Ochoa 2011).

is a private cost. However, *for society* these are transfer payments, not real resource costs. To think otherwise is a fallacy of composition.

In Young's *Encyclopaedia Britannica* entries on 'Land' and 'Rent' (in Sandilands 1990a, pp.133-36) he accepted that when considering the *personal* distribution of income a two-fold classification (labour plus capital conflated with land) is appropriate, because people are also richer or poorer according to their *ownership* of both land and capital. But for other purposes he preferred Smith's tripartite distinction between land, labour and capital, and recognised that supply of land is inelastic and immobile, unlike labour and capital. But he also noted (*ibid*. p.99) that in the dynamic view "the continued existence of capital and labour depends on whether they will pay. Hence we have 'interest' which is needed to call out saving. But there is no supply-price of landlord. From the individual point of view, one can 'invest' in either land or capital. But, socially, investment in land merely transfers ownership, while capital investment produces capital."

Elsewhere (*ibid.* p.121), Young also contrasts the case of 'investment' in land: its actual supply is fixed, hence "a rise of rents does not tend to counteract itself by stimulating supply."

Therefore, in growth theory investment in land and the income it yields is not to be confused with contribution to growth. Its rental income is what it gains (or is *attributed* to it, as Currie [1997] put it) through its scarcity relative to the size and growth of labour and capital.

Smith (1776: V.II) favored the land tax, calling it a 'peculiar' tax for several reasons: land rents are "a species of revenue which the owner enjoys, in many cases, without any care or attention of his own;" it cannot be passed on in higher rents or prices to consumers; it cannot be hidden or moved; it is relatively easy to identify and collect; and "no discouragement will thereby be given to any sort of industry".

This conforms to Frank Ramsey's (1928) famous rule for optimal taxation: tax those goods or factors with the lowest sum of supply and demand elasticities (Stiglitz 2015; Misak 2015).

Next we consider Currie's advice on money, inflation and central banking.

3. The influence of Smith on money and inflation

Currie's 1931 PhD thesis, *Bank Assets and Banking Theory*, was submitted at a time of deep economic depression. His *Supply and Control of Money in the United States* (1934) followed, in which his preferred definition of money was the actual means of payment in circulation as purchasing power, citing Frank Taussig and Allyn Young in support (Currie 1934, p.48); see also Laidler,1999, pp.196-69).[8] Today, that is called 'M1', consisting of notes and coin plus bank demand deposits subject to transfer by cheque. Currie distinguished this aggregate from the ambiguous concept of 'credit' which included bank loans (as bank assets) as well as bank (and non-bank) savings or time deposits (as liabilities). (Currie 1934b) also calculated the first series for the United States of the income velocity of his definition of money. This required

[8] Currie (1987) wrote a similar book on money in Colombia, again emphasizing the distinction between 'money' as means of payment, versus 'credit' and 'savings' and the implications for control. See also Luis Lorente's (2020) critique of Young's influence on Currie on money and growth in Colombia.

that he also compile the first 'M1' series for the United States. Here is Currie (1931) on Smith in chapter 1 of his PhD thesis:

> As with many other topics, Adam Smith's views on the proper kind of bank assets are very important both because he was the first to treat the subject in a cogent and exhaustive manner and also because of the undoubted influence he exerted on later writers. His discussion ran in terms of his theory of paper money although, as always, he was at pains to identify the general with the particular interest. As, according to Adam Smith, "money [meaning specie] is the only part of the circulating capital of a society, of which the maintenance can occasion any diminution in their neat revenue",[9] it is important to economize such money and this is the function of banks. But there is a definite sum of money which is sufficient to circulate the whole annual produce of land and labour and the degree to which specie can be economized by paper money is limited by this sum. If more is issued it will overflow the "channel of circulation" and being presented at the banks for specie to export, will cause embarrassment to them. Smith's fertile mind cast about for some means of insuring that only a proper amount of paper could be issued by banks. He discovered the formula in the idle money balances of merchants: "What a bank can with propriety advance to a merchant or undertaker of any kind, is not either the whole capital with which he trades, or even any considerable part of that capital; but that part of it only which he would otherwise be obliged to keep by him unemployed, and in ready money for answering occasional demands. If the paper money which the bank advances never exceeds this value, it can never exceed the value of the gold and silver which would necessarily circulate in the country if there was no paper money."[10]

Smith (and Currie) effectively wanted money to be 'the wheel of wealth' in which the economy's total output is most efficiently exchanged. This implied that the supply of money be kept closely in line with the amount required for current spending plans, to avoid both inflation and deflation. For Currie this was the same as saying that the supply of money should be kept in line with demand for money, where 'demand for money' is defined as the reciprocal of its velocity of circulation. Thus, increased demand for money (as a proportion of income) implies a fall in its turnover, hence a deflationary pressure; and vice versa. This ensures the validity of the $MV \equiv Py$ identity, with M = money; V = velocity; P = average price level; y = current volume of goods and services being bought and sold. It can also be expressed as $M = kPy$, where k is the reciprocal of V, or the proportion of money national income (Py) that the community wishes to hold in the form of potential purchasing power (M).

In Currie's PhD thesis, notably in chapter I on the history of the theory of bank assets, and chapter IV on bank assets and the business cycle, and more fully in his 1934 book, two things stand out, consistent with Smith:

(i) The importance of variations in bank reserves, whether as gold (specie, as above in Smith 1776) or banks' cash reserves with the central bank. These reserves are key to control of the total supply of money. Reserves depend on the proportion of bank assets and liabilities required by law, plus any additional 'precautionary' or 'prudential' reserves the commercial bankers themselves may choose to hold, partly dependent on the strength of their customers' demand for loans. The interest rate also comes into play here.

---

[9] Smith 1776 (1976, II.II.305).
[10] *Ibid*. p.323.

(i) The type of loans preferred by banks and their customers and/or allowed by law.

These considerations were central to the nineteenth century controversy between supporters of the 'Banking School' versus the 'Currency School'. Currie opposed the Banking School who believed that the safest, least dangerous bank loans (bank assets), from the point of view of liquidity, were short-term commercial loans, ostensibly to finance borrowers' 'working capital', or goods in warehouses awaiting final sale. These loans would soon be repaid, thus cancelling the short-term increase in the money supply and its expenditure. In the brief interim, the supply of money would be used to bring goods to final completion and sale. Then money and goods were believed by the Banking School to be in a non-inflationary balance.

However, this depended on whether the average period (say 3 months) of the bill was longer than the average turnover of the money being lent. The longer the period, the more likely an inflationary outcome. Also, when the percentage of bank liabilities held as reserves is less than 100 percent, increased bank lending generates increased demand deposits (hence spending) that could easily outstrip output growth. This evidently worried Smith when considering the extent of responsible issue of paper money not fully backed by gold reserves.

What particularly impressed Currie (1934) was the "perverse elasticity" of money in the business cycle. In Banking School theory – or what Currie dubbed "the-needs-of-trade" or "commercial-loan" theory of banking – there was an inherently unstable, pro-cyclical bias instead of a contra-cyclical, automatically stabilizing influence.[11] Demand for loans was greatest in the upswing of the cycle. If loan demand is passively accommodated, lending would be boosted on the upswing and curbed on the downswing.

Furthermore, turnover of time deposits is significantly slower than for demand deposits. Thus growth of spending also depends on whether time deposits are subject to reserve requirements. Moreover, if reserves are also imposed on the savings deposits of *non-bank* financial institutions this has a further pro-cyclical impact on the money supply.[12] Those destabilizing cycles throw sand in Adam Smith's otherwise happier conception of money as an efficient lubricant for the "wheel of wealth".

Currie as policy adviser in Colombia: (i) The 1949-50 World Bank Mission.

Currie's first advisory work in Colombia was as head of the 1949 World Bank mission (Currie 1950).[13] The country then was much poorer than today. For current purposes – to reveal the Smith-Young influence on Currie's advice in Colombia – it is worth reproducing here part of Currie's own (1981a, ch.5) account of how he viewed the problem of Latin American development in 1950, the objectives he set and his main recommendations. He emphasizes positive market forces and the potential harm from government controls, but accepts the government's essential role in the provision of social goods and infrastructure:

[11] However, Currie joined Young in favoring discretion over fixed rules in monetary policy.

[12] This affected the operation of Colombia's housng finance system instututed in 1972 (see below).

[13] See Alacevich (2009), Currie (1981a, ch.5) and Sandilands (1990, ch. 6). Elba Cánfora (2006) details Currie's work in Colombia and was in charge of cataloguing Currie's archive for the Biblioteca Luis Angel Arango, Bogotá, and for Duke University's Special Collections library, Durham, NC.

> … Little precedent existed for such a study. I was given complete discretion over the planning of scope, size, timing, requirements for personnel, and much of the recruitment… Two strong convictions (or biases) permeated the study. One was a very progressive stance on objectives, which were variously expressed as raising the standard of living, meeting basic human needs, and reducing inequality, especially in consumption. (The report was almost Puritan in its condemnation of ostentatious consumption.) This attitude was shown in the choice of programs, as well, which included wide-ranging reforms and increased expenditures in health, education, and public services of all kinds. This "liberal" stand on objectives was counterbalanced by an equally strong "conservative" stand on the necessity of raising productivity per capita and of relying to the fullest extent feasible on market forces – competition, mobility, and economic incentives, with as much freedom from direct controls, rationing, and subsidies as possible. (Although Colombia had a highly oligarchical governing class at the time, with only as much interest in the masses' standard of living as was politically expedient, the country was passionately devoted to controls and had little faith in the market, so that both biases of the report ran counter to current beliefs.)

After detailing the recommendations on measures to ensure better distribution directly (via an extended provision of social goods and services, and by shifting a larger burden of taxation onto a progressive tax on incomes and capital gains, he turned to the recommendations on productivity that could improve distribution indirectly. This is where increasing the effective size of the market and increased specialization came into play:

> To increase productivity, emphasis was placed on improving the infrastructure… and the economic atmosphere or environment. The mission found that because of topography and neglect the country could be classified into at least four main zones with wretched communication and transport among them. Hence, the small total internal market (11 million people with an average income of $175) did not even provide, except for a very few goods, a single market where some significant economies of scale could be achieved. The report paid a great deal of attention, therefore, to the necessity of providing a highway network that would connect the main cities and the ports with paved roads built to modern grade and curve specifications, a single-gauge interconnected national railroad system…, improved ports and waterways, and a modern air transport organization… While providing this infrastructure for industrialization and urbanization, the report urged that the state reduce its own industrial and commercial activities, controls, and subsidies and create a more favorable atmosphere for competitive private enterprise, domestic and foreign. The emphasis was on competition, since actually the very few large companies in various fields shared many privileges and advantages, which did not always appear on the surface. Thus the report was critical of a proposed new state-integrated steel plant, but it favored smaller and competitive electric scrap-reducing furnaces for the production of a few standardized products, together with foundries for miscellaneous work.[14]

[14] However, interest groups favoured it and the government acceded to it on social grounds: Colombia had large deposits of coal and iron ore in a very poor region, but costs were huge and the steel's quality poor, handicapping steel-using industries and requiring large subsidies. Previously, high-quality steel was imported from Venezuela. Henceforth, that was blocked by tariffs. But Albert Hirschman (1958, p.108), in Colombia from 2002-06, favored the project in the belief that its considerable backward and forward linkages would stimulate other industries. In Currie's (1974) criteria for a sector to qualify as a successful leading sector, Colombian steel badly failed the test. Alacevich (2009) and Álvarez et al (2020) discuss the 1950s disputes between Currie and Hirschman. See Jeremy Adelman (2013) and Sandilands (2015, 2015b, 2017) on Hirschman's influence in Colombia generally.

> The report's position on agriculture puzzled many and aroused considerable opposition. Even at this early date, I favored increased productivity per worker in agriculture, in part to meet the needs of the growing cities and in part for export, but largely to release manpower to produce other things… But I was bothered by the fact that there was literally no cultivation on the flat temperate lands near Bogotá and little in the rich valley of the Cauca River, so that corn, cassava, cooking bananas, potatoes, and vegetables were grown mostly in small patches on steep hillsides. I took a dim view of using flatlands for raising dairy and beef cattle on an extensive scale and came up with the idea of a capital tax on land inversely proportional to its yield. (There was some precedent for this idea in similar rates on urban land held off the market.) But the motivation was not so much "agrarian reform" as it was providing an incentive for the more intensive use of good land by the existing owners…
>
> Part of the improved economic atmosphere was to be provided by greater price stability, greater freedom of trade and of capital movements, a neutral and single rate of exchange (the various rates were chronically overvalued for all potential exports except coffee), a more competitive market for credit, and a higher level of governmental efficiency and planning in general.
>
> The setting for this ambitious program was not propitious. The country was torn by political strife… When a military dictator assumed office in April 1953, he was actually hailed as a liberator.

With this coup d'état, Currie retired from advisory work until the 1958 return of civilian government. Meanwhile, he bought a farm on which he raised a prize-winning herd of dairy cattle on the edge of the Sabana de Bogotá. Then, in 1959, he undertook a study of the Magdalena Valley region that borders Colombia's Atlantic coast. This study and its policy recommendations echoed, on a smaller scale, the 1950 World Bank study.

Currie continued as a part-time farmer from 1959 until 1966 when he sold his farm to resume advisory work full time.

Currie as policy adviser (ii) *Operation Colombia* (1961)

One of the problems of the Magdalena Valley was invasion by colonizers whose slash-and-burn mentality was causing destruction of forest resources built up over millions of years for the sake of short-term gain. Increased agricultural production was often negligible relative to the destruction. Influenced by his own experience as a farmer and disabused of romantic notions about an idyllic rural way of life commonly held by urban intellectuals, Currie was increasingly convinced that the only fundamental solution to rural poverty and ecological destruction was to create jobs outside of agriculture for low-productivity farmers. The main problem was not excessively large landholdings, or '*latifundismo*', but excessive parcelization or '*minifundismo*', primitive technology, and soil erosion due to an unscientific approach to land use. The future lay with modern agriculture on farms of sufficient size to make mechanization and soil conservation more economic.

However, this makes it increasingly hard for traditional famers to compete. Big increases in productivity on modern farms caused their output to outstrip the inelastic growth of overall demand. These farms may employ more workers to plant and harvest crops, but it was a fallacy to conclude that this would increase rural employment overall. The displacement effect was on-going and would continue unabated. The problem of rural poverty could not be solved within agriculture alone. On its own, agriculture encounters diminishing returns. But it could play its part in a process of Youngian increasing returns if there were adequate mobility for those displaced. If they did find better work (mainly in the bigger towns and cities), this would increase the overall size of the economy, hence also increase the growth of demand for food and raw materials. Viewed dynamically, traditional farmers' effective marginal productivity would then actually be seen to have been negative.

This was Currie's diagnosis of the low and unequal overall standard of living. It led him to present *Operación Colombia* to president Alberto Lleras in 1961 (detailed in Sandilands 1990, ch.8). It called for a 'breakthrough' plan to overcome the drag of rapid population growth on per capita incomes. (Higher birth rates in rural than in urban areas were another reason to accelerate migration.) As Currie (1981a, p.72) summarized the document:

> *Operation Colombia* proposed the measure, shocking for the times, of aiding and facilitating the exodus of poor farmers to the cities – a process that had always gone on in countries experiencing growth but that was, nevertheless, almost universally deplored. The project represented a marriage of my views on the inadequate mobility of the lowest paid labor, the conditions that must favor the adoption of technology and more efficient ways of doing things, and the possibility of tapping by exogenous means unexploited real demand in important sectors and so giving a positive stimulus to the mobility process. The study contained considerable detail, with quantitative targets of employment, building, and a system of indexation to boost savings and loans to finance building.

However, he said he could not have chosen a worse moment to present this program. It was the year of president Kennedy's *Alliance for Progress* and a major 'agrarian reform' (land redistribution) program. *Operación Colombia* flew in the face of prevailing ideas on development and the president rejected it in favor of United Nations proposals that Currie insisted were an offspring of the earlier Harrod-Domar model of growth that linked (i) a modest (2.5 percent) average annual per capita income growth target, to (ii) mechanical estimates of the associated capital needs – to be largely financed through foreign borrowing.

Currie as policy adviser: (iii) Beyond *Operation Colombia*

Undeterred, and despite the ensuing period (1962-66) being the administration of the relatively ineffectual president Guillermo Valencia,[15] Currie developed his ideas, with further empirical support, in *Accelerating Development* (1966). There, he again argued for a breakthrough sufficiently powerful to overcome obstacles to mobility and better factor proportions. Population growth was keeping wages low and increasing inequality, skewing consumption patterns away from basics and toward luxuries with high import content.

He questioned whether in the conditions prevailing in Latin America the classical belief that sufficiently low wages and competition would in themselves bring about a change in relationships of labor to capital to ensure full employment. Not, he insisted, when dealing with a completely differing scale and type of 'employment' in which so much labor was

[15] Under the *Frente Nacional* agreed by Liberals and Conservatives at the ending of Rojas Pinilla's military dictatorship in 1958, power was shared for 16 years of alternate four-year terms of office, under Alfonso Lleras Camargo (Liberal, 1958-62), Guillermo Valencia León (Conservative, 1962-66), Carlos Lleras Restrepo (Liberal, 1966-70), and finally Misael Pastrana Borrero (Conservative, 1970-74).

effectively unemployed. The burden on the mobility mechanism was correspondingly much greater than in the history of advanced countries where the classical system functioned relatively efficiently in providing steadily increasing nonagricultural employment, to make sufficient headway against the vicious-circle effect in today's developing countries.

Thus Currie (1966, pp.78-79) wrote:

> Classical economics gave us not only tools of analysis highly useful and relevant to the problems of development but also some hypotheses bearing on the sequence of events that are relevant. The Malthusian hypothesis was one, closely related to the law or principle of diminishing returns. The [Smith-Marshall-Young] economies of scale suggested the existence of a different type of sequence – increasing demand, growing markets, economies of scale, reduced marginal costs and prices, growing demand.

These sequences, he insisted, are directly opposed: (i) Malthusian pessimism and a vicious circle culminating in stagnation, versus (ii) Smithian optimism that an efficiently functioning set of market forces will give rise to a benign circle of steady progress.

> This sharp division obscures the possibility of a different and more complex sequence in which technical progress, the economies of scale, foreign borrowing, and other expansive forces exist side by side with and outweigh a high rate of population growth, the resort to soils more costly to exploit, and to sharply rising costs of urban public services. In such a sequence, rising per capita income may continue *for a time* but vicious-circle effects may eventually outweigh the benign-circle effects… What is needed is a drastic revision in objectives, diagnoses, strategy, and magnitude of effort (*ibid*. pp.78-9).

With Carlos Lleras Restrepo elected president in 1966, whatever hopes Currie may have had for a better focused growth strategy were disappointed. He saw little improvement in official policy: Lleras was "able but not able enough, and charging off in all directions, in an increasingly dictatorial fashion" (Sandilands 1990, p.218). The agricultural problem was to be tackled largely through 'land reform' of the redistributive kind rather than through a program to enhance rather than discourage rural-urban migration. In March 1967, Lleras imposed martial law and Currie was increasingly pessimistic.

Though he had been appointed dean of economics at the National University in June 1966, where he established the Centro de Investigaciones para el Desarrollo (CID) in early 1967, he resolved to take his message abroad from July for the next four years – to Canada at Simon Fraser University and to Britain at Glasgow and Oxford Universities.

Meanwhile, he left the leadership of CID to Roberto Arenas, an able engineer who had quickly absorbed Currie's ideas. He was politically astute and was later appointed head of the National Planning Department (DNP) by president Pastrana who assumed office in 1970. Arenas then persuaded the president to urge Currie to return to Colombia as chief adviser at DNP.

Currie as policy adviser: (iv) The background to his *"Plan of the Four Strategies",* 1971-74, involving "leading" and "following" sectors via Youngian reciprocal demand.

While abroad, Currie could absorb the latest literature on economic development, to gain greater confidence in his own ideas. When the call came from Pastrana in early 1971 he was finalizing the manuscript of another book on development. However, with his new assignment in Colombia, he shelved his manuscript to concentrate on *Guidelines for a New Strategy of Development* (Currie 1971) which Pastrana outlined in his presidential message to Congress, July 1971.

One chapter of Currie's unpublished book was especially relevant to his subsequent writing of those *Guidelines*. This chapter (later published in Sandilands 2018) appraised Paul Rosenstein Rodan's (1943) theory of the 'Big Push' that would involve comprehensive planning across many industries to overcome indivisibilities and exploit complementarities through a simultaneous investment programme, underwritten by foreign aid. Rosenstein Rodan argued that this could ensure that while a small number of investments may not generate sufficient demand for firms to operate at an efficient scale, a 'Big Push' could overcome this and make modern industry competitive against traditional low-wage, low-productivity handicrafts.[16]

Currie (1970) believed that Hirschman (1958) had distracted attention from the issue of whether a Big Push was necessary or feasible toward what Currie saw as a separate issue, namely whether Rosenstein Rodan's Big Push would best involve a balanced or an unbalanced growth strategy, with those terms not clearly defined. Currie complained that Hirschman had misrepresented the Big Push as a theory of 'balanced growth' and had rejected it in favour of a strategy of deliberately created *unbalanced* growth.

Currie also criticised, as a completely false issue, Hirschman's argument that "the advantage of a see-saw advance over 'balanced growth', where every activity expands perfectly in step with every other, is that it leaves considerable scope to *induced* investment decisions and therefore economizes our principal scarce resource, namely genuine decision-making" (1958, p.63). Currie (1970, p.4) countered that "the possibility of an expansion where every activity is perfectly in step with every other in any underdeveloped country… is ludicrous." In a growing economy, disequilibrium exists wherever prices are moving ahead of costs. Exploiting those profit opportunities generates pecuniary external economies for the rest of the economy (as in Tibor Scitovsky, 1954). Echoing Smith and Young, unsettling, countervailing forces thus ensure that disequilibrium is *characteristic* of a freely functioning market economy. Currie wanted to promote those *growth-enhancing* disequilibria by removing *unnatural* blocks to free market forces. He decidedly did not seek to create tensions and disequilibria that suppress those benign forces.

In advancing his particular strategy of unbalanced growth, Hirschman also advocated his controversial 'Principle of the Hiding Hand': the deliberate concealment of the true costs and benefits of projects, so that industrialists would undertake projects on which they otherwise would not risk their own money. Hirschman suggests that in this way the strategy would produce net benefits to the economy as a whole even if the initial investors lose their money

[16] Krugman (1993) reformulated 'Big Push' theory. Alacevich (2009, p.176; and 2021, pp.74-77) discussed him on Hirschman's defence of Colombia's steel plant on the basis of technical input-output ratios, downplaying the small potential demand for its costly output.

(not the planners' nor Hirschman's). It also ignores the disincentive effects of those losses on future investors. Hence Currie's rebuke that the Hiding Hand principle is "not only dubious economics but even more dubious morality".[17]

Hirschman goes on to suggest that those benefits would be greatest, the greater the net external economies generated. And the gain would be best achieved by identifying industries most connected to others, again through the greatest number of 'backward and forward linkages', or technical input-output coefficients. Hirschman (1958, pp.106-07) has a chart that ranks different industries according to this criterion, with interdependence and complementarities measured by the ratio of their backward and forward inter-industry purchases and sales. These are given as percentage measures that would be greater or lesser *irrespective of the absolute value of sales output*.[18] Furthermore, (a) those sales would have been measured on the basis of past output, *not on the basis of the future demand potential* (which Hirschman nowhere discusses in this context); and (b) input-output tables usually assume fixed coefficients, whereas in reality the ratios vary with the size of the market.

What Hirschman (1958, p.108) noted, however, was that "the industry with highest combined linkages score is iron and steel. Perhaps the underdeveloped countries are not so foolish and so exclusively prestige-motivated in attributing prime importance to this industry!"

In contrast, viewing Currie's leading-sector strategy from a Smith-Young perspective, several points may be highlighted. First, it was motivated by his concern that the secular growth rate in Colombia had been far lower than one would imagine its potential, given Colombia's abundant natural resources, a strong entrepreneurial class, and gross underutilisation of both its manpower and capital stock. He had no faith that a simple increase in the capital stock as a proportion of national income would yield faster growth when there is a demand-side constraint on expected profits. And increased deficit spending may not be an answer, given that chronic inflation over past decades had failed to increase the average growth rate.

On the contrary, some of the most egregious harms inflicted on the free enterprise system arise fundamentally from the non-neutral impact of inflation. And that, in turn, is often owing to poor central bank control over the money supply, as discussed above.

Currie's July 1971 *Guidelines* was followed by fuller details in *El Plan de las Cuatro Estrategias*, launched in December with Currie its driving force. This emphasised (i) a new index-linked housing finance system to encourage non-inflationary savings and a corresponding increase in real demand for urban housing and related infrastructure and services; (ii) realistic exchange rates to promote exports; (iii) incentives for increased agricultural output and

[17] Flybjerg (2017) reviewed Hirschman (1963) and concluded that empirical support for a benevolent 'hiding hand' was weak, being subject to "optimism and sample biases". It was more often malevolent. He disputed Sunstein's (2015) suggestion that the hiding hand supported his 'nudge' theory in behavioral economics.

[18] Contrast Nurkse (1953) whose horizontal and vertical inter-industry complementarities required that individual sectors grow at different rates according to differing elasticities of demand; that is, he called for sectoral supply to balance the unequal growth of sectoral demand. It did not mean that all sectors should expand at the same rate or according to input-output coefficients.

productivity based on an expected increase in demand for food and raw materials; and (iv) improved income distribution from more productive urban work for migrants, along with greater capture of the "unearned increment" from higher urban land values.

In Currie's (1974) formal identification of the conditions that make a sector qualify as a potential leader in the growth process, it needed an unexploited or latent demand that can be actualised. It also helps ensure that higher growth is *sustained* if the leading sectors enjoy high price and income elasticities of demand. It also helps if its size is *large* relative to overall national income, for then an acceleration of its own growth rate has a larger impact on the economy's overall growth. This would then further generate increased real demand for other goods and services throughout the economy. The latter sectors would be *followers*. However, their potential supply response to the increased demand (exploiting the pervasive underutilisation of spare capacity) would in turn also help to sustain the higher overall growth rate. Collectively, followers would engage in *reciprocal exchange* with the increased output of the leaders, depending on their own supply and demand elasticities (again in line with Young's 1928 insights).

In a technical "Note" to this 1928 article, Young stressed ways in which growth can be boosted if demand switches from sectors where demand elasticity is low and/or marginal costs are increasing, toward sectors where opposite conditions exist. Young is referring to hypothetical market conditions. Currie's distinction between leading and following sectors – with focus on actual and/or *potential* elasticity of demand that could be released by the removal of harmful blocks – led him to advocate policies to bring about the kind of growth-enhancing changes suggested by Young (1928, p.61) in the final paragraph of a technical Note where he wrote:

> The degree in which the decreasing returns encountered in certain fields of economic activity operate as a drag upon the securing of increasing returns in other fields depends upon the relative elasticities of demand for the two types of products. But this consideration… serves to make clear the general relation between increasing returns and the "extent of the market".

Currie identified construction and exports as potential leading sectors capable of tapping into a greatly increased demand.[19] This potential was not to come from subsidies but from institutional reforms to remove the anti-market obstacles that had been repressing demand.

There was, clearly, huge unmet need for decent accommodation in Colombia's burgeoning cities – burgeoning mainly in poorly serviced squatter settlements. The state was providing some subsidies, but subsidies were never going to be adequate to satisfy the vast and growing need for higher standards of housing and related infrastructure.

Inflation obstructed the natural flow of resources into this sector because it drives up nominal interest rates. With Colombian inflation usually in double digits, interest rates reflected this.

[19] Currie did not select leading sectors because they were more able to reap *internal economies of scale* than other sectors (though that could help). Steel would be a leading sector on that criterion, Rather, it was because construction and many exports faced unusually *large potential real market demand* if distortions associated with inflation were removed. See Currie and Rosas (1986).

But compare the schedule of real repayments on a mortgage of, say, $100,000 when inflation is 4 percent and nominal interest 6 percent, as against inflation at 16 percent and nominal interest 18 percent. The real rate is the same, but initial service charges (for interest alone) would triple, severely affecting affordability. Demand falls even though over time the real value of the outstanding mortgage falls and the value of the property increases.

Savers lose if, as often happens, nominal interest rates rise by less than the rate of inflation, making the real rate negative. Meanwhile, those (usually richer) borrowers fortunate enough to secure a mortgage in this repressed market gain. There is no justice in this. Savers respond by shifting their savings into dollars or gold or the stock market or land. The result is a fall in the real supply of housing finance, and this further squeezes effective demand.

There were two ways to deal with this distortion: either (i) bring inflation down, preferably close to zero; or (ii) adjust both the assets and liabilities in the housing finance market to reflect the inflation rate. Currie advocated both but, realistically expecting continuing inflation, advocated new 'savings and housing corporations' (Corporaciones de Ahorro y Vivienda, CAVs) applying 'monetary correction' to both their assets and liabilities to preserve their real value. The new system was inaugurated in 1972.

Housing and construction as a leading sector

The new index-linked housing finance system[20] was key to the first of the four strategies. It ameliorated the worst distortions arising from chronic inflation. Against many people's expectations, the system led to a very big expansion of personal savings flowing into it, thanks to the much higher real return on the system's savings deposits. At the same time, there was an even bigger increase in the demand for mortgages even though, again in real terms, the real long-run cost of a mortgage was also increased. The key was the much more even spread, over time, in the servicing of borrowers' debts. This meant that the 'front-end loading' or cash-flow problem associated with high nominal interest rates was eliminated. The large latent supply and demand for housing finance was thus actualised, with consequential expansion of building. Incomes increased, generating a corresponding increase in demand for all the materials and services needed in the construction sector, along with increased demand for consumer goods. Since it was all financed by increased savings, it was non-inflationary.

However, inflation did persist and even increased over the next few years. The central role of the Banco de la República is monetary control. However, the Banco blamed the UPAC system because of the huge increase in CAV deposits. But these were savings deposits which are not part of the money supply in the sense of the community's active means of payment (see above). The motive for holding money (cash plus demand deposits) is very different (current

[20] Popularly known as the 'UPAC' system because savings deposits and mortgages were expressed in 'units of constant purchasng power' (*Unidades de Poder Adquisitivo Constante*) with values adjusted daily. Currie and Rosas (1986) detail the system's early dynamism, but after 1994 a new government was less committed to its role in a leading-sector strategy. Meanwhile, Currie and Montenegro (1984) show how the system could enhance both growth and stability by combining it with contra-cyclical macroeconomic policy including improved monetary control (Sandilands, 1990, ch. 13).

spending plans) from the main motive for increased saving (delayed spending plans and interest income), and their turnover differs greatly. But semantics mattered: because CAV savings were also 'deposits', the Banco combined them with commercial banks' demand deposits into a single aggregate and then imposed reserve requirements on them all. This effectively congealed a portion of UPAC savings, so the act of saving was actually a helpful counter-inflationary influence by indirectly reducing the money supply. But, unhelpfully, it also lessened the system's positive impact in its non-inflationary financing of an important leading sector.[21]

At the same time, Currie explained the Smithian benefits of specialisation in the financial system. The capture and allocation of *savings* should be the responsibility of specialist savings and loan institutions. Meanwhile, administration of the nation's *money supply* should be the separate, specialist business of commercial banks.

Currie also insisted the central bank should specialise in the monetary control of inflation. He constantly warned of the inflationary dangers if the central bank also acted as a development bank. The temptation to extend credit excessively can then conflict with its primary role. The allocation of credit (loans) should also be left to separate, specialist institutions, in fields such as housing, agriculture or insurance.

Another Smithian concern was monopoly versus competition. Hitherto, housing finance was mainly the province of the monopolistic central mortgage bank (the Banco Central Hipotecario, BCH) that enjoyed an excessively profitable commercial margin between its lending and borrowing rates. Under the UPAC system, the BCH was licensed to be one of ten institutions under new rules, but it then had nine competitors. It was another example of the Youngian insistence that increased specialization need not conflict with competition: "Large production, not large-scale production, permits increasing returns."

2. Exports

Export promotion was the second plank of the Plan of the Four Strategies. The logic of exports as a leading sector was similar to what motivated the selection of construction: its great potential but hitherto largely suppressed demand.

Inflation was again at the root of the problem and related to a faulty diagnosis of its underlying cause, the failure to control the money supply. Instead, the central bank was more likely to blame the exchange rate. Monetary inflation causes a free exchange rate to depreciate, but the authorities are then inclined to control this rather than the money supply. The resultant over-valued exchange rate stifles net exports. A new, 'crawling-peg' system of exchange-rate adjustments, linked to the domestic inflation rate, significantly boosted exports and import substitution.

3. Technification of Agriculture

[21] When savings are used to make loans, borrowers are credited with demand deposits for their purchase of homes etc. Savings are depleted (until new savings flow in), but the money supply is unchanged, so long as banks remain fully loaned up, with no idle reserves.

This continued apace, confirming the optimism of Young and Currie that agriculture had a potentially high elasticity of supply, as and when increased demand made it pay. There then needed to be less ambivalence about improving its productivity. The Green Revolution held less danger to rural or urban prosperity when the natural labour-displacement effect was accompanied by adequate new urban employment opportunities. While agriculture would always grow more slowly than elsewhere due to low elasticity of demand, its absolute growth would be higher than before thanks to higher overall incomes.

4. Improved income and wealth distribution

Finally, there was commitment to better income distribution. This was closely related to how the first three strategies moved low-paid workers into better jobs. An additional benefit is that per capita costs of education, health and other services are much lower in cities than in scattered rural communities, so more is provided.

However, operating against equalizing trends is the pressure of population on urban land values. These values further increase with increases in social infrastructure and services. Landowners gain while tenants pay increased rents.

Colombia has taken some steps to address this problem but not enough. First, '*valorización*' charges are imposed on residents and businesses whose land values are significantly increased by costly infrastructure projects. These charges help defray the costs, but much is financed out of general taxation, and taxpayers include the poor.

Second, a major redistributive opportunity arose in 1973 when an almost vacant 450-hectare site, owned by a public charity, became available. It adjoined a complex of government offices and other institutions that employed around 40,000 persons. A new, so-called "city-within-the-city", El Salitre, was built, incurring no land acquisition costs because the land was already publicly owned. But the resulting agglomeration economies greatly enhanced its rentable value, giving the government the opportunity to cross-subsidize the rents of lower-income families living and working there.

The new housing was conventionally built to suit mainly middle- and lower-middle-income families. This was opposed by those who thought new housing should be built primarily for the poor, and even that much of the building be done directly by the future occupants, using their own relatively unskilled, labour-intensive methods, "to increase employment", but with public provision of the site and services. Naturally, this 'Robinson-Crusoe' approach was inefficient. It sacrificed the Smith-Young economies of specialisation when families use the earnings from their own special skills to employ other specialists.

Currie argued that if housing is energetically converted into a leading sector it should be possible to build each year at least as many new units as new family formations. Reliance is then on the filtration or escalation process, whereby the middle classes move into good new homes they can afford, vacating their existing homes for families a little poorer, and so on down the line. The very poorest could then, as part of the same process, move into accommodation which, though among the least attractive and least well located, could nonetheless be better than what they had before. The very worst housing can then be demolished. This elevates overall living standards, with reduced burden on the state.

It is hoped this paper has shown Adam Smith's continuing relevance to Latin America, and that Colombia's president Gustavo Petro, elected 2022, will agree.

References

Adelman, J. (2013) *Worldly Philosopher: The odyssey of Albert O. Hirschman*, Princeton and Oxford: Princeton University Press.

Alacevich, M. (2009) *The Political Economy of the World Bank: the early years*, Palo Alto: Stanford University Press.

Alacevich, M. (2021) *Albert O. Hirschman: An Intellectual Biography*, New York: Columbia University Press, 2021.

Alacevich, M., Asso, P.F. and Nerozzi, S. (2015) 'Harvard meets the crisis: the monetary theory and policy of Lauchlin B Currie, Jacob Viner, John H. Williams, and Harry D. White', *Journal of the History of Economic Thought,* 3 (September): 387-410.

Álvarez A., Guiot-Isaac, A, and Hurtado J. (2020) 'The quarrel of policy advisers that became development experts: Currie and Hirschman in Colombia,' *History of Political Economy*, 52(2): 275–30.

Blitch, C.P. (1995) *Allyn Young: the peripatetic economist*, London and Basingstoke: Macmillan Press.

Borrero Ochoa, O. (2011) 'Betterment Levy in Colombia,' Lincoln Institute of Land Policy: *Land Lines*. April: 14-19.

Boughton, J.M. (2021) *Harry White and the American Creed: how a federal bureaucrat created the modern global economy (and failed to get the credit),* New Haven and London: Yale University Press.

Buchanan, J.M. and Yong J.Y. (1999) 'Generalized increasing returns, Euler's Theorem and competitive equilibrium', *History of Political Economy,* 31.3: 511-523.

Cánfora, E. (2006) 'Los trabajos de Currie sobre Colombia.' *Economía Colombiana,* 313-314: 32-216.

Chandra, R. (2006) 'Currie's 'leading sector' strategy of growth: an appraisal', *Journal of Development Studies, 42*(3): 490-508.

Chandra, R. (2020) *Allyn Abbott Young*, Cham, Switzerland: Palgrave Macmillan.

Chandra, R. (2022) *Endogenous Growth in Historical Perspective: from Adam Smith to Paul Romer*, Cham, Switzerland: Palgrave Macmillan.

Chandra, R. and Sandilands, R.J. (2006) 'The role of pecuniary external economies and increasing returns to scale in the theory of increasing returns', *Review of Political Economy*, 18:2 (April): 193-208.

Chandra, R. and Sandilands, R.J. (2021) 'Nicholas Kaldor, increasing returns, and Verdoorn's law', *Journal of Post-Keynesian Economics,* 44(2): 315-339.

Clapham, J.M. (1922) 'On Empty Economic Boxes', *The Economic Journal*, 32: 305-14.

Currie, L. (1931) 'Bank Assets and Banking Theory', unpublished PhD thesis, Harvard University.

Currie, L. (1934) *The Supply and Control of Money in the United States*, Cambridge MA: Harvard University Press. (Reprinted, with foreword by Karl Brunner, New York: Russell & Russell, 1968.)

Currie, L. (1934b) 'A Note on Income Velocities', *Quarterly Journal of Economics,* 48 (February): 353-54.

Currie, L. (1934c [1968]) *A Proposed Revision of the Monetary System of the United States*, Washington D.C.: US Treasury. (Published in 1968 edition of Currie (1934), pp.195-226.)

Currie, L. (1950) *The Basis of a Development Program for Colombia*, Washington DC: International Bank for Reconstruction and Development.

Currie, L. (1961) *Operación Colombia: un programa nacional de desarrollo económico y social*, Barranquilla: Cámara Colombiana de la Construcción.

Currie, L. (1966) *Accelerating Development: the Necessity and the Means,* New York: McGraw-Hill.

Currie, L. (1971) *Guidelines for a New Strategy of Development*, Bogotá: Departamento Nacional de Planeación.

Currie, L. (1974) 'The "leading sector" model of growth in developing countries', *Journal of Economic Studies* 1(1): 1-16.

Currie, L. (1981) 'Allyn Young and the Development of Growth Theory', *Journal of Economic Studies* 8(1): 52-60.

Currie, Lauchlin. (1981a) *The Role of Economic Advisers in Developing Countries*, Westport: Greenwood Press.

Currie, L. (1983) 'The Multiplier in Economic Literature', *Journal of Economic Studies*, 10(3): 42-48.

Currie, L. (1987; 2nd edn 1991). *Moneda en Colombia: comportamiento y control.* Bogotá: Fondo Cultural Cafetera.

Currie, L. (1997). 'Implications of an Endogenous Theory of Growth in Allyn Young's Macroeconomic Concept of Increasing Returns', *History of Political Economy*, *29*(3): 413-443.

Currie, L. (2013) 'Implicaciones de una teoría del crecimiento endógeno en el concepto macroeconómico de rendimientos crecientes de Allyn Young', *Revista de Economía Institucional*, *15*(1): 95-126.

Currie, L. (2017) 'The Big Push and Balanced and Unbalanced Growth', in Sandilands (2017): 10-25.

Currie, L. (2018) 'El Gran Impulso y el crecimiento balanceado y desbalanceado', *Revista de Economía Institucional, 20*(39): 69-92.

Currie, L. and Montenegro, A. (1984) *Crecimiento con Estabilidad: un modelo*. Bogotá: Fundación Simón Bolivar.

Currie, L. and Rosas, L.E. (1986) *UPAC: A Theory Converted into Successful Reality*. Bogotá: Instituto Colombiano de Ahorro y Vivienda.

Flybjerg, B. (2017). 'Did megaproject research pioneer behavioral economics? The case of Albert O. Hirschman', in B. Flybjerg (ed.) *The Oxford Handbook of Megaproject Management*. New York: Oxford University Press: 155-93.

Hirschman, A.O. (1958) *The Strategy of Economic Development*, New Haven: Yale University Press.

Hirschman, A.O. (1963) *Development Projects Observed*, Washington DC: The Brookings Institution.

Kaldor, N. (1966) *Causes of the Slow Rate of Economic Growth of the United Kingdom: an inaugural lecture*, Cambridge: Cambridge University Press.

Kaldor, N. (1972) 'The Irrelevance of Equilibrium Economics', *The Economic Journal*, (82):1237-55.

Kaldor, Nicholas. (1974) 'The Role of Industrialization in Latin American Inflation', in David T Geithman, ed., *Fiscal Policy for Industrialization and Development in Latin America*, Gainesville: University of Florida Press: 14–28.

Krugman, P. (1990), *Rethinking International Trade*, Cambridge, MA: The MIT Press.

Krugman, P. (1992) 'Toward a counter-counterrevolution in development theory', in Summers, L.H. and Shah, S. (eds) (1992) *Proceedings of the World Bank Annual Conference on Development Economics,* Washington D.C.: The World Bank.

Laidler, D. (1999) *Fabricating the Keynesian Revolution,* Cambridge: Cambridge University Press.

Laidler, D. and Sandilands, R.J. (2002) 'An Early Harvard Memorandum on anti-Depression Policies: An Introductory Note', *History of Political Economy,* 34:3: 515-552.

Lorente, L. (2022). *Dinámica del Crecimiento Económico,* Bogotá: Universidad Nacional de Colombia.

Mehrling, P.G. and Sandilands, R.J. (eds) (1999) *Money and Growth: selected papers of Allyn Abbott Young,* London: Routledge.

Misak, C. (2020) *Frank Ramsey: a sheer excess of powers*, Oxford: Oxford University Press.

Nurkse, R. (1953) *Problems of Capital Formation in Underdeveloped Countries*, Oxford: Oxford University Press.

Perälä, M. (2006) 'Looking at the other side of the coin: Allyn Young and early development theory', *Journal of the History of Economic Thought*, *28*(4): 461-488.

Ramsey, F.P. (1927) 'A Contribution to the Theory of Taxation', *Economic Journal*, 38 (152): 47-61.

Romer, P.M. (1986) 'Increasing Returns and Long-run Growth', *Journal of Political Economy*, (94): 1002-38.

Rosenstein-Rodan, P.N. (1943) 'Problems of Industrialization of Eastern and South-Eastern Europe, *Economic Journal*, 53 (209): 202-11.

Sandilands, R.J. (1980) *Monetary Correction and Housing Finance in Colombia, Brazil and Chile*, Farnborough: Gower Press.

Sandilands, R.J. (1990) *The Life and Political Economy of Lauchlin Currie: new dealer, presidential adviser and development economist*, Durham NC: Duke University Press. (Spanish edn (1990) *Vida y Política Económica de Lauchlin Currie*, Bogotá: Legis Editorial.)

Sandilands, R.J. (ed.) (1990a) 'Nicholas Kaldor's Notes on Allyn Young's LSE Lectures*, 1927-29', Journal of Economics Studies*, 17 (3/4): 1-170.

Sandilands, R.J. (ed.) (2004) 'New light on Lauchlin Currie's Monetary Economics in the New Deal and Beyond', *Journal of Economic Studies*, 31 (3/4): 170-403.

Sandilands, R.J. (2009) 'Solovian and New Growth Theory from the Perspective of Allyn Young on Macroeconomic Increasing Returns', *History of Political Economy*, 41: 285-303.

Sandilands, R.J. (2015) 'The 1949 World Bank Mission to Colombia and the Competing Visions of Lauchlin Currie (1902-93) and Albert Hirschman (1915-2012)', *Research in the History of Economic Thought and Methodology,* 1:1-38

Sandilands, R.J. (2015a) 'La misión del Banco Mundial a Colombia de 1949 y las visiones opuestas de Lauchlin Currie y Albert Hirschman', *Revista de Economía Institucional*, 17(32): 213-32.

Sandilands, R.J. (2015b) 'Review of Jeremy Adelman on Albert O. Hirschman', *Journal of the History of Economic Thought*, 37:4 (December): 674-80.

Sandilands, R.J. (2017) 'Albert Hirschman, Lauchlin Currie, "linkages" theory, and Paul Rosenstein Rodan's "Big Push"', Glasgow: University of Strathclyde, Department of Economics Discussion Paper, 17-17.

Sandilands, Roger. (2018) 'Albert Hirschman, Lauchlin Currie, la teoría de los "eslabonamientos" y el "Gran Impulso" de Paul Rosenstein Rodan', *Economía Institucional*, 20:39: 53-92.

Scitovsky, T. (1954) 'Two Concepts of External Economies', *Journal of Political Economy,* 62: 143-51.

Smith, Adam. 1776 [1976], *An Inquiry into the Nature and Causes of the Wealth of Nations*, Chicago: University of Chicago Press, reprint of Edwin Cannan 1904 edition.

Solow, R.M. (1956), 'A Contribution to the Theory of Economic Growth', *Quarterly Journal of Economics,* 70 (February): 65-94.

Solow, R.M. (1957), 'Technical Change and the Aggregate Production Function', *Review of Economics and Statistics* 39(August): 311-320.

Stiglitz, J.E. (2015) 'In Praise of Frank Ramsey's Theory of Taxation.' *Economic Journal,* 125: 235-68.

Sunstein, C.R. (2015) 'Albert Hirschman's Hiding Hand.' Foreword to Albert O. Hirschman, *Development projects observed*, third ed., Washington, DC: Brookings Institution.

Warsh, D. (2006), *Knowledge and the Wealth of Nations: A Story of Economic Discovery*, New York & London: W.W. Norton.

White, H.D. (1933), *The French International Accounts, 1880-1913*. Cambridge: Harvard University Press.

Vickrey, W.S. (1955) 'A Proposal for Revising New York's Subway Fare Structure,' *Journal of the Operations Research Society of America*, 3(1):38-68

Young, A.A. (1913), 'Pigou's Wealth and Welfare', *Quarterly Journal of Economics*, 27:4 (August): 672-86.

Young, A.A. (1928), Increasing returns and economic progress. *Economic Journal*, *38*(152, pp. 527-542. Reprinted in Mehrling and Sandilands (eds) (1990).

Young, A.A. (1929), 'Economics', London: *Encyclopaedia Britannica*. Reprinted in Sandilands, ed. (1990): 115-33.

Young, A.A. (2009) 'Rendimientos crecientes y progreso económico', *Revista de Economía Institucional*, *11*(21): 227-243.