3. Gold and capital

> ‘Wilson … is surely my star pupil’
> *D. B. Copland*

As Wilson was preparing to leave Australia to study, Copland was readying himself for the same purpose. Copland might have borne a professorial title, but he also had several resemblances to the raw research student packing for Oxford. Like Wilson, he was young: only thirty-one years old. Like Wilson, he was an antipodean who had never left Australasia. Like Wilson, he wanted to undertake ‘further study’, and had been considering undertaking a doctorate at the London School of Economics (Hodgart 1975, p. 4). Copland may have had the dignity and income of a Chair, but his psychology was still that of a youthful direction seeker. This chapter, then, is the story of two young Australians making their voyage of discovery in the wider world.

Unlike Giblin or Brigden, the two were travelling the world in time of peace, rather than war. But the dislocation of the war, and the attempts to surmount and efface it, were to leave a strong impression on their ‘further study’. On the eve of their journeys, on 28 April 1925, Winston Churchill, as Chancellor of the Exchequer, made an announcement of general significance for the world, and of a more professional significance for the two travelling scholars. In an effort to re-establish peacetime normality the gold standard would be restored with immediate effect, and the gold value of a pound sterling fixed. [1] This decision has been confidently judged to be damaging to Britain’s economy, and has been (more speculatively) blamed for the Wall Street boom and the subsequent crash that was to demolish all hopes for the old financial order. Such attempts of Churchill to make good the impact of the war were to preoccupy the thoughts of all four in the 1920s.

Their thinking left marks on economic doctrine – especially on the linkage of capital inflow, the terms of trade, and the real exchange rate – long after the effects of the First World War had been submerged. In the 1970s the linkages traced out by Wilson and the others took on a renewed life as key elements in the analysis of the ‘Dutch Disease’ and the ‘Gregory Thesis’.

America via England

When Wilson arrived in Oriel College towards the end of 1925, economics was stirring at Oxford. An ‘honours school’ in Politics, Philosophy and Economics had been created in 1920, and ‘the almost irresistible rise of economics in PPE’

[1] Keynes told Copland that, in being consulted by the Chancellor, he had realised that ‘Churchill did not grasp the intricacies of the gold situation and the exchanges’ (UMA DBC 16 June 1925).

had commenced. The old subject of Political Economy had been renamed, and Modern Statistical Methods were being taught. Roy Harrod was lecturing on Money, Banking and Currency, and International Economics. One future Nobel Laureate, James E. Meade, was a fellow student of Wilson's at Oriel, although still a disciple of Major Douglas, and still absorbed in classical studies. [2] Wilson bought Keynes' *Tract on monetary reform*.

Oxford rewarded Wilson. He won the Beit Prize in Colonial History with an essay entitled 'Social and economic experiments in Queensland'. He began the dissertation proposed by Cannan, 'The import of capital', spent long days in the Royal Colonial Institute and the British Museum accumulating data, and successfully submitted his DPhil in October 1929.

But Wilson was not entirely content with Oxford. His tutor at Oriel was inexperienced and 'knew nothing about the subject I was interested in'. And there were deficiencies in physical as well as human capital. 'I couldn't find a calculating machine in Oxford, they looked horrified at me when I asked' (Wilson 1984). Wilson was offered some seven-figure logbooks instead. In 1920s Oxford, it was all done by pencil.

And he had discovered America. In 1926, as a member of a student debating group assembled under the auspices of the English Speaking Union, he visited 38 universities in six weeks. He felt he was 'treated as royalty'. This was the beginning of a lifelong attraction to the United States.

He successfully applied for a 'Commonwealth Fund Scholarship' [3] to study in the United States. The University of Chicago seemed to be the right place to go. The physical capital was impressive. 'The first compulsory thing when I hit Chicago was to be driven over to the Commerce School and instructed how to work a few calculating machines. The facilities in Chicago were quite excellent for the day. They had a marvellous machine [that did] six figures by six figures by pushing a button and tot up the total for you' (Wilson 1984). And here was an intensity lacking at Oxford; in addition to final examinations, he faced quarterly examinations in subjects with such inhospitable titles as Economic Theory. There were new fangled topics: Industrial Organisation and Relations, presumably taught by a professor he was to befriend, Paul Douglas, [4] best recalled today for bestowing his name to the Cobb-Douglas production function. But, above all, there taught at Chicago Jacob Viner, who had just published

[2] Another (unlikely) Rhodes Scholar studying PPE in those years was P. R. Stephensen, the littérateur of 1930s Australian literary nationalism. J. C. Eccles, the 1963 Nobel Laureate in Medicine, was the 1925 Rhodes Scholar from Victoria.

[3] In other words, the Harkness Scholarship, that had been established in 1918 by the widow of Stephen P. Harkness, a partner of John D. Rockefeller.

[4] A liberal Democrat Senator 1949–67.

Canada's balance of international indebtedness, 'which was very much on the same sort of lines I was working on'.

Viner was not easily impressed by would-be scholars. One former student of his, James Buchanan, recalled many years later that Viner felt it his 'sacred duty' to annihilate his students' confidence. But Viner held Wilson to be 'one of the two or three best students I have ever encountered' (quoted in Cornish 2002, p. 14). [5] Wilson was awarded a PhD for his topic, 'Capital movements and their economic consequences', which Viner in his *Studies in International Trade* commended as 'a distinct advance over previous attempts'.

Wilson was never a scholar in the closet. One acquaintance recalls his first meeting with him:

> [I] had never met anyone quite like him. With his (almost perpetual) cigarette in one hand, a Scotch (or was it an Australian beer?) in the other, he was delivering himself of the most outlandish stories of whatever Conference he and the Treasurer had just been attending – all in that slightly husky, even graveley voice which so well befitted the lapidary comments he was making. (Stone 1997, p. 5).

Yet Wilson was not truly gregarious. He was uninterested in the nuzzling fellowship of the herd. He was drawn to a particular species of sociality – competitive sociality. This was often physical – tennis, table tennis, skating, billiards. But if he found little reward in simple familiarity and companionability, he was still capable of intimacy. He wrote regularly to his family '[his letters] are deeply personal and record the exceptionally close family relationship enjoyed by Wilson, especially with his father' (Cornish 2002, p. 15). [6] In Denver he met Valeska Thompson, an American, who was to follow him back to Chicago. They married in June 1930.

England via America

Copland had been seeking leave to study abroad before Wilson had been persuaded to complete even a single year of the BCom. His 'zest for study of contemporary developments in economic theory overseas was unsurpassed in Australia' (Tom Fitzgerald). [7] His mentor, James Hight, did not visit Europe until he was fifty-seven years old. But Copland was not to wait: he had won a Laura Spelman Rockefeller Memorial Fellowship, another blessing of oil money to higher learning, and that was to take him to the United States and Europe.

[5] Viner also noted that Wilson 'has an unusual degree of intellectual maturity for a person of his age'.

[6] Wilson's 'abiding fascination' with the motor car is first observed here (Cornish 2002, p. 15).

[7] JCPML 00653/068/12/43/1.

He departed Sydney 8 April 1925, and crossed the American continent bearing an impressive diary of appointments. On 29 May he conferred with Herbert Hoover, then the driving Secretary of a reinvigorated United States Department of Commerce. Copland judged the meeting a success. There was a sympathy about their aims. Hoover was zealous for efficiency and rationality. He favoured a 'scientific tariff uninfluenced by political considerations'. Copland approved. 'There is a little of the politician but a good deal of the statesman … He gave a very decidedly favourable opinion to economists, and economics as a science' (UMA DBC 29 May 1925).

He then visited the newly founded Duke University in North Carolina and dined with the anthropologist Bronislaw Malinowski, also visiting the United States on a Laura Spelman Fellowship. Malinowski told Copland he had recently 'dined with two negroes at [the adjacent town of] Durham – this is probably the only time it had been done there' (UMA DBC 1 June 1925). [8]

From New York he embarked for Europe. A few days after his arrival in London, he lunched with John Maynard Keynes and Lydia at Gordon Square (19 June 1925). He was not taken with Lydia: 'no doubt she is a good dancer, but she looked very plain and her small figure did not suggest much capacity'. She was a 'spoilt prima donna'. Keynes was also a little disappointing. 'Keynes is not as tall as I thought and rather more effeminate'. [9] But they spoke 'pleasantly' for three hours. Keynes contended that Churchill's worst error was not to restore the gold value of the pound, but to restore it at the old rate instead of a lower rate. Keynes said Classical economics 'had rather worked itself out', and that he was writing 'a serious treatise on money'. This was the first knowledge to Copland of a book that was to loom in his policy analysis of the Great Depression, Keynes' *Treatise on money.*

Copland was more unmistakably impressed by Joseph Alois Schumpeter, whom he met in Germany in the following month. [10] Schumpeter complained to Copland that Germany had 'still too many so-called economists who are not at all advanced thinkers', and welcomed the possibility of Australian students undertaking doctorates in Germany. 'He had [the] idea that Japan and Australia were enemies and thought it very curious that Australia and Japan should be allies in war,

[8] An anthropologist would be especially sensitive to the taboos enveloping eating. The taboos of race and dining in the United States of the 1940s are delicately traced by Gunnar Myrdal (1944).

[9] It was a rare occasion for persons to be disappointed in Keynes' height. Known as 'lanky' at school, he was allegedly six foot six.

[10] While visiting Kiel, Copland observed German officers singing an anthem of the defunct German Empire. With his characteristic political nose he noted: 'It was significant that the hall porter sat through the song while the officers and their ladies rose' (UMA 4 July 1925).

but also very chivalrous of Australia to enter the war on behalf of England' (UMA DBC 4 July 1925).

Tracts on monetary reform

The most urgent business of post-war economists was to understand and correct the disequilibrium in international economic relations in the post-war world. Churchill's announcement of 28 April 1925 was the most salient manifestation of an impulse to reinstate the financial normality that had been swept away by the First World War. Before 1914 virtually the whole world – with China the main exception – adhered to the gold standard, a system that sought to make gold the essence of anything reckoned as money, thus reducing the various national currencies to merely measures of certain amounts of gold. In an age of imperial rivalry, gold was the world's financial emperor who brooked no borders.

The gold standard was destroyed in 1914. All of the belligerent nations (save the United States) discarded the gold standard and experienced rapid inflations. At the close of the war, Germany, Austria and Russia plunged into hyperinflation that annihilated traditional parities. [11] The end of the war also brought reparations, which applied new pressures to exchange rates. Some feared that the burden of reparations on the defeated powers would depreciate their exchange rates, as the defeated countries, in order to pay for reparations, sought to capture export markets by cheapening their exports.

Australia, too, effectively left the gold standard with war. Australian currency had been fixed to gold since the establishment of the Sydney Mint in 1855. With war the gold standard became a fiction, the note issue expanded, and in the six-year period following 1913–14 consumer prices rose by 60 per cent. With both the Australian pound and sterling separated from the gold standard, the rate of the exchange between the two pounds became variable. By 1924 the Australian pound had deviated from pound sterling by four per cent, a small deviation but the largest in 70 years, and the deviation scandalised many.

In seeking to understand this monetary instability, the four economists could draw on two opposing tendencies in monetary thought: one of which might be called 'neo-quantity theorising', and the other 'post-quantity theorising'.

Principal among neo-quantity theorists was Brigden's patron, Edwin Cannan, and to a lesser degree, Irving Fisher. Fisher had popularised the Quantity Theory in a so-called 'equation of exchange':

[11] Schumpeter had been part of the Austrian Government in 1919. He put to Copland that 'inflation at that time was an absolute necessity, socially everything had broken down and to refuse more currency would have brought revolution'.

$$MV = PT$$

where the symbol, M stood for the stock of money, V for the number of times M was turned over in the year (the velocity of circulation), P the price of a basket of goods during the year, and T the volume of trade over the year.

The Quantity Theory of Cannan and Fisher was logically distinct from the gold standard. But as quantity theorists wanted the money supply limited, and as the gold supply *was* limited, the notion of 'making money gold' was appealing. Therefore neo-quantity theorists favoured a restoration of the link with gold, although some (like Fisher) preferred the link to be a variable one. In Australia the neo-quantity theorists were in control of the newly instituted Notes Issue Board which controlled the quantity of Australian currency, and they applied a regime of monetary restriction from which they expected a restoration of the link to gold (Coleman 2001b).

The alternative to the Quantity Theory might be called 'post-quantity theorising', the leading articulator of which was Keynes in his *Tract on monetary reform*. This alternative accepted that the Quantity Theory bore truth, but maintained that the truth it bore was incomplete, conditional, even potentially misleading. They attached a significance to 'credit' and bank lending, which the Quantity Theory never had. To the 'post-quantity theorists', the question of the relation between money and prices, which had seemed closed with the Napoleonic Wars, was again an open one.

In this contest the four did as they usually did – cordially receive the modern innovation, while expressing respect for the past. None of the four took an extreme position. None of the four had a sharply defined doctrinal position.

Brigden, in a paper he submitted to the *Economic Journal*, took up a theoretical position imbued with the spirit of compromise. 'The growing liquidity of ownership makes it more impossible to draw a line between promises to pay money on demand at some future date, and even other property rights virtually convertible into money at will' (Brigden 1923, p. 22). Therefore, he concluded cautiously, 'the quantity theory is somewhat attenuated'. He expressed his vision of this attenuation with a metaphor seemingly deliberately modelled on Tycho Brahe's own attempt at compromise between Copernicus and Ptolemy. Whereas the classical view placed money at the centre of the solar system, with trade and banking orbiting about it, the new thinking would place trade at the centre, and would have money and banking doing the orbiting. Brigden would demote money, but not quite so radically: trade is the sun and money the orbiting planet – to this extent Brigden was the revolutionary Copernican. But banking itself was not a distinct planet charting its own course, but merely money's moon. [12]

[12] The paper was not accepted. Brigden later dismissed it as 'too academic'.

The contribution of the remaining three was not to affirm any strong theoretical proposition, but to give a measure of welcome to the tendencies of modern policy, and to investigate the alternatives empirically.

Copland's contribution was a novel investigation of the relation between the outburst of inflation and monetary expansion that Australia had experienced since 1914. His main concern was to determine whether the Quantity relationship held between money and prices. He began by using a wide range of Australian economic data to calculate estimates of M, V and T for 1901–17. He then computed the magnitude of (V/T)M for 1901–17. If the 'equation of exchange' had held in Australia over the 1901–17 period, this computed magnitude should also have been the P series. So having produced the P series which would have been observed if the 'equation of exchange' had applied, he then compared it with the P series that was actually observed. His judgement was that the two P series – the hypothetical and the actual – displayed close agreement. This being so, he felt justified in concluding that 'The equation of exchange may be regarded as true for Australia' (Copland 1920, p. 505).

The exercise was an elementary one by later standards, but Copland maintained that it was entirely original: the hypothetical P series which he had generated was, he said 'the first of its kind known to the writer'. And he seems to have been correct. The level of empirical investigation of the Quantity Theory still consisted of comparing percentage changes in actual M and actual P. [13] It was not until the mid-1920s that Holbrook Working initiated the calculation of coefficients of correlation between M and P (Working 1923).

The confirmation of Copland's contribution was its acceptance – in no ordinary way - for publication in the *Economic Journal* by its editor, J. M. Keynes. Keynes wrote: 'I am much obliged to you for sending me your masterly article on 'Currency and prices in Australia', and I gladly accept it for the *Economic Journal*. You have clearly taken great pains in the investigation, and the results are of high general interest.' [14]

Copland did not see his vindication of the Quantity Theory as vindicating the policy of a gold standard. As Copland claimed: 'Modern theorists base their work on this distrust ['of any standard based upon a commodity like gold'], and one of the principal aims of monetary theory in recent years has been to devise a means of escape from the gold standard' (Copland 1920). At most, Copland and

[13] See, for example, the effort by the senior academic figure in British economics, J. S. Nicholson (1917).

[14] Keynes' quote in Copland's application for the Sidney Myer Chair of Commerce at the University of Melbourne, (UMA 11 July 1924).

Giblin [15] would grant a benevolent nod to a flexible gold standard of the type favoured by Fisher – in this scheme, the gold value of money would be fixed by government, but its gold value would be periodically revised by government.

Copland himself did not fight the war against the gold standard. But as editor of the *Economic Record* he gave room to his old Tasmanian pupil Keith Isles to launch a Quantity Theory critique of the gold standard from Caius College, Cambridge (Isles 1931).

Isles began with the contention that the gold standard had been adopted in Australia with little or no consideration of its suitability to local circumstances. It was, regrettably, not suitable, as it left the money supply vulnerable to balance of trade shocks, since the world would use money balances in times of export booms to pay for Australian exports (and, conversely, Australia would use part of her money balances to pay for imports in times of import booms). Compounding the difficulty, the banking system spread throughout the economy (both secondary and primary) the impact of disturbances to the foreign exchange reserves, caused by such fluctuations in exports of primary products. An increase in sterling balances in London (due perhaps to improved wool prices) would induce banks to increase lending in Australia. As a consequence, 'Rapid expansions and contractions in credit' are the concomitant of the gold standard. 'Monetary policy should be designed to prevent them [= reverberations of disturbances of primary products], but Australian monetary policy actually promotes them'.

In the next issue of the *Economic Record*, Isles' paper was criticised by his old classmate from Economics II, Roland Wilson (Wilson 1931a). His studies since the two last met had prepared Wilson well to give Isles a lesson in careful empirical inquiry. He showed that a correlation Isles had prized – that between 'net increase in banking funds abroad' and the 'excess of deposits over securities' – was an accounting tautology. As for the hypothesised dependence of advances upon the excess of deposits over advances, Wilson showed the correlation between the two was *negative*. But Wilson was more interested in truth, than in proving Isles wrong. He also demonstrated, in support of Isles, a correlation of 0.44 of excess advances with prices.

Isles replied in the next volume of the *Economic Record* (Isles 1932). He conceded some errors. He perhaps need not have been so modest. In the last pages of his reply he noted the 'considerable sympathy' between a plotting of the annual rate of change in prices in Australia between 1913 and 1930, and the plotting of the (inverted) unemployment rate. Isles had stumbled on the Phillips Curve.

[15] Footnote 1 reads: 'The writer wishes to acknowledge his great indebtedness to Mr. L. F. Giblin, Government Statistician of Tasmania, for many valuable suggestions'.

Lazarus and Dives

Wilson did not pursue the exchange with Isles. His critique of Isles was only a passing broadside. His leading concern was the publication of the contents of his DPhil and PhD: *Capital imports and the terms of trade examined in the light of sixty years of Australian borrowing*, that was published in 1931 by Melbourne University Press, through the good offices of Giblin and Copland, after Angus and Robertson had declined it. His debt to Viner, Wilson imposingly admits: 'Where I have disagreed with him I am probably wrong. If I am right the triumph is not mine but my master's'.

Wilson's thesis addressed this question: 'How is a country's terms of trade affected by the flow of capital in (or out) of it?' Will a country sending sums abroad find its imports cheaper, or more expensive in terms of its exports? This had become topical in the post-war world, with the prospect of large sums flowing from Germany to the victorious powers. But the question was as old as Mill. And the received answer was also as old as Mill. International borrowing ('capital imports' or 'capital inflow') improves the borrowing country's terms of trade: its imports will become cheaper relative to its exports. This is because to borrow from abroad allows payment for part of imports by means of the loans from abroad. The borrowing country is, therefore, relieved of the necessity of exporting a value equal to its imports. Exports are consequently contracted by the home country. And with an unchanged world market for its exports, that reduction will make its exports more valuable. The terms of trade improve.

The logic of Mill's argument can be extended to other questions. What will happen when the loan has to be repaid and serviced? Any net repayment means that the country must now export a value *greater* than its imports, in order to pay not just the imports but also the debt service owed to the foreigners. The terms of trade must fall. This conclusion about debt service had an easy application to the consequence of German reparations to the Allied Powers. As servicing debt is like a reparation, reparations will necessitate a depreciation in the German terms of trade, which will amount to an additional burden to be carried by Germany. This phenomenon – reparations deteriorating the terms of trade and making the burden of reparations even worse – was known as the 'Transfer Problem', and generated a considerable literature.

Wilson announced in *Capital imports and the terms of trade* that he would 'contest the accepted views' on this issue. There was, he said, 'no theoretical grounds' for Mill's assertion. However, said Wilson, there did exist a strong theoretical expectation concerning a distinct, but related, question that classical theorising had never pondered: What was the impact of capital inflows on the prices of goods that could be neither imported or exported? Wilson argued that the price of such 'non-tradeables' relative to other goods would rise with capital inflows. This thesis of his concerning capital inflows and 'the second terms of trade' –

the price of tradeables relative to non-tradeables – was to become a recurrent theme in Australian theorising throughout the twentieth century, and would bear fruit ultimately in the Gregory Thesis.

Wilson's basic insight with respect to capital flows and the terms of trade is that any capital inflow amounts to a transfer of purchasing power from the lending economy to the borrowing economy. This implies that, while the increase in purchasing power induces the borrowing country to buy more of its own export goods and therefore supply less of it to world markets, at the same time the lending country will be buying *less* of the borrowing country's export good, on account of its reduced purchasing power. There is, therefore, a contraction in the *demand* for the export good that accompanies the contraction in its supply. It is perfectly possible that the contraction in demand for the good will equal the contraction in supply. In that case the equilibrium value of the export good is unaltered, rather than increase. A capital inflow need not increase the value of the borrowing country's export goods. Correspondingly, a capital outflow need not reduce the value of the borrowing country's export goods. Hence Mill was wrong in unconditionally predicting transfers and outflows abroad would worsen the terms of trade. One consequence of this conclusion was that the 'Transfer Problem' might be an imaginary terror.

Wilson argues his claims in terms of the beggar Lazarus and Dives the rich man in the parable of the rich man and Lazarus, (Luke 6:19–31) 'clothed in purple and fine linen, and fared sumptuously every day'. It is then expounded in cumbersome numerical examples. But if Wilson's theoretical methods were obsolete, his empirical technique was modern. With the methods he had been taught in Chicago, he used Australia's lavish borrowing as a test case. 'In this as in other directions Australia has almost turned herself into the social and economic laboratory which is often sought but rarely found' (Wilson 1931b, p. 3). With data for borrowing and the terms of trade for 1893–1913, Wilson computed the coefficient of correlation between capital imports and the ratio of export to import prices to be -0.29. Borrowing *deteriorates* the terms of trade (the opposite of what Mill maintained). [16]

Capital imports and the terms of trade was reviewed in the *American Economic Review* ('closely reasoned'), the *Journal of Political Economy* ('an important contribution to the literature of international trade'), and by Harrod in the

[16] How so? In Wilsonian logic a negative correlation between capital inflow and the terms of trade would be explained by the British demand for Australian wool being reduced by British loans to Australia: Britons have no money to buy wool because they have lent it to Australia. Modern intertemporal analysis would suggest the negative correlation is explained by causality running from the terms of trade to capital flows: a fall in the value of exports induces Australia to borrow from abroad in order to smooth its consumption in the face of a negative income shock.

September 1932 issue of the *Economic Journal*. Judging the book to be 'extremely interesting and suggestive', and 'a valuable contribution to the literature on international trade', he seized on Wilson's suggestion that the terms of trade impact of capital movements was ambiguous, and re-presented the case with a greater lucidity than Wilson. Hicks wrote to Harrod to say he was 'very interested in your review of Wilson'. [17] More cautiously, D.H. Robertson told Harrod: 'I haven't yet coped properly with your review of Mr. Wilson on capital transfer, and am wondering whether you aren't between you really saying the same thing as Pigou in his highly concentrated and still unpublished paper'. [18] Indeed, in the following (December 1932) issue of *The Economic Journal*, the kind of ideas Wilson was exploring were presented by Pigou definitively, if rather laboriously, in mathematical terms.

But the burgeoning literature on capital flows and the terms of trade ignored the second theme in Wilson's logic: the relations between capital inflows and the 'second terms of trade' – the price of tradeables to non-tradeables – a theme that was to have resonance in the 1970s, with notions of the 'Dutch Disease' and the 'Gregory Thesis'.

Wilson's deliberations on this issue began with the simple distinction between 'exportables' and 'domestic' goods, or, in equivalent modern language, 'tradeables' and 'non-tradeable'. A cigar is exportable. A haircut is not. It is a non-tradeable. Undeniably, British demand for German non-tradeables (say, German haircuts) must be lower than German demand for German non-tradeables (the German haircut). Therefore, any transfer of purchasing power from Germany to Britain must reduce demand for German non-tradeables, and so reduce their price relative to German and British exportables. By a parallel logic, the transfer of purchasing power to Britain would increase the value of British non-tradeables. Such a transfer of purchasing power would comprehend not only 'reparations' but also foreign aid, capital inflow ('capital imports'), or the discovery of some natural resource that earns large economic rents. In all cases, the relative price of non-tradeables in the country receiving the inflow will increase. Gratifyingly, while Mill's thesis about capital flows and the terms of trade was not verified empirically, Wilson could report that 'some verification is found in Australian experience for the proposition that imports of capital tend to be positively correlated with increases in the ratio of "domestic" price level to the price level of "international" commodities'.

It was Australian economists who were to cultivate Wilson's ideas on the 'second terms of trade', especially Trevor Swan (1918–89), who was appointed in 1950 as the foundation professor in economics at the Research School of Economics

[17] http://economia.unipv.it/harrod/edition/editionstuff/rfh.11e.htm.

[18] http://economia.unipv.it/harrod/edition/editionstuff/rfh.117.htm#10924.

at the Australian National University (ANU), after Wilson had declined the post. Swan was no protégée of Wilson. In Australia his teachers were R. C. Mills, Ronald Walker, S.J. Butlin, John La Nauze; and overseas Michal Kalecki, James Meade, Nicholas Kaldor, Richard Stone, and Arthur Smithies. Nor had he received Wilson's patronage: Coombs performed that role for Swan. But in early 1950s Canberra, the new professor was in regular contact with the now senior mandarin of the Treasury, Roland Wilson. It was a source of pride to Swan that he, the professor, regularly lunched with the policy-maker Wilson. [19]

The first fruit of Swan's digestion of Wilson's thesis was the 'Swan Diagram' (Swan 1955), which demonstrated how, in a neo-Keynesian context, capital inflows would necessitate an appreciation in the value of services (that is, non-tradeables). Wilfred Salter (1929–63), at Swan's department in the ANU's Research School of Social Sciences from 1956 until 1959, recast the same ideas in neoclassical form in the 'Salter Diagram' (Salter 1959). Perhaps the subsequent development of Wilson's ideas closest to Wilson's original approach was that undertaken by Allan Ross Hall, appointed in the early 1950s to the Research School of Social Sciences, in his paper 'Capital imports and the composition of investment in a borrowing country' (in Hall 1963). In this paper Hall wrote that 'conclusions of Roland Wilson's *Capital imports and the terms of trade* … have not been fully appreciated by Australian economic historians (including the present writer a dozen years ago)'.

But the most significant revival came with Trevor Swan's return to a public stage in the early 1970s, after some 'difficult years', with his review of 'Overseas investment in Australia. Treasury economic paper no. 1' in the *Economic Record* (Swan 1972). According to Swan:

> This paper might be labelled No.2, for the first on the subject was published by Roland Wilson in 1931. Wilson even then, before he had actually been recruited by Treasury, was an outstanding Treasury officer and economist. In 1931 he disputed and overturned the established views on capital imports and terms of trade held by Taussig, Viner, Keynes.

Swan subsequently notes in his review:

> An important condition for running such a [current account] deficit, transmuting paper assets into real resources, is that our domestic costs and prices should rise relative to the prices of importables and exportables. This truth … is the one asserted against the previous orthodoxy by Roland Wilson in 1931.

[19] Warren Hogan, a PhD student of Swan in the 1950s, recalled years later his shock at being grilled at a social function by Wilson on the content of his thesis. Trevor Swan, observing the harried student from another corner of the room, crossed the floor to be present at the cross-examination.

The key application of the notions that Swan had cultivated was now about to take place, in the 'Gregory Thesis'. R. G. Gregory had joined the Research School of Social Sciences at the ANU in 1971, having trained in international economics. In his 1976 paper, 'Some implications of the growth of the mineral sector', Gregory pressed a simple but socially significant implication of Wilson's thesis: that an increase in the value of non-tradeables would cause a depression in the production and incomes in the import-competing sector. The paper resonated sharply with current events. Booming values in the prices of fuels during the 1970s and 1980s and the associated inflows to develop them had raised the prospect of de-industrialisation. [20]

Miles from anywhere

Wilson did not pursue his own ideas. Viner had expected Wilson to undertake an academic career in North America. With an Oxford DPhil and Chicago PhD he had formidable qualifications. His Tasmanian peer Arthur Smithies was to show what path Wilson could have taken. Smithies (1907–81) had attended the University of Tasmania shortly after Wilson; had won a Rhodes Scholarship shortly after Wilson; had studied PPE at Oxford shortly after Wilson; and then, like Wilson, transferred to an American university, Harvard. There he was supervised by Schumpeter, who had by then left Bonn, and had ended up with an Australian doctoral student after all. (Schumpeter took it upon himself to write to Giblin about his 'Tasmanian' whom he had 'got know so intimately'. 'He has a remarkable aptitude for clever and efficient handling of statistics', and possessed 'quite unusual merit on a theoretical subject'). After completing his doctorate, Smithies joined Wilson at the Bureau of Census and Statistics in Canberra. But there the two careers diverge. After a stint at Michigan, Smithies wound up at Harvard, published prolifically in *Econometrica*, the *Review of Economic Studies*, and the *Quarterly Journal of Economics,* did important work on the 'inflationary gap' (Smithies 1942), and became editor of the *Quarterly Journal of Economics* and the *Journal of Economic Abstracts*.

A career like Smithies was possible for Wilson. Toronto offered him a first job. But a life in learning was not the most important thing to Wilson. He always wore his doctoral robes very lightly, even when such a distinction was a rarity.

[20] In the 1990s much attention was given to the notion that capital inflows appreciate the 'real exchange rate' (i.e. the purchasing power of foreign currency in terms of the goods and services of the home country). This is just another application of Wilson's thesis. The thesis implies that a capital inflow into Britain makes British non-tradeables more expensive relative to tradeables. The purchasing power of German currency in Britain has declined. The British real exchange rate has appreciated.

[21] Much later, in a graduation address to the University of Tasmania in 1969, he disowned any vocation for academic life, saying that: '… I myself can lay no claim to scholarship in the deeper sense of the term. I never felt deeply attracted to scholarship for its own sake' (Address to University of Tasmania 2 April 1969).
[22]

He would begin as a Lecturer at the University of Tasmania from 1 August 1930. Wilson evidently felt a tug of something other than purely professional calling.

> When he informed Jacob Viner that he was returning to Tasmania, the famous economist expressed great surprise, remarking that 'Tasmania is miles away from everywhere', to which Wilson replied: 'It's not miles away from Tasmania. (Cornish 2002, p. 16).

[21] 'I have, of course, attracted a few degrees, mostly of a technical or specialist nature, but most of those in this assembly will know that even earned degrees do not always go hand in hand with scholarship.' Wilson appears to have always styled himself Mr Wilson.

[22] Wilson added, however, that 'my dear friend and teacher, the late James Brigden did try to inculcate in me some of his own love of scholarship'.