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### G.C. Harcourt: An economist with accounting sense

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Abstract. Geoffrey Colin Harcourt's work on the interface between accountancy and economics is a part of his legacy that is less well-known than his work on the capital controversies. This paper argues that the analytical findings of this research effort are an important and integral part of Harcourt's overall research programme. In this paper we review Harcourt's work on the relation between economics and accounting from the time of his undergraduate thesis to 1969, the date of the publication with Robert Parker of the edited volume Readings in the Concept and Measurement of Income. This paper intends to offer insights on A) the evolution of Harcourt's thought during this period and a survey of the significant contributions he made to research in this field during this time, and B) the legacy of his approach and findings. We argue that his ideas in this domain offer important insights in doing post-Keynesian economics in the Harcourt mould. We find that Harcourt's insights on the issues relating to the accounting rate of profit as used by economists remains relevant to today, as well as his implicit suggestions on how to deal with the complexities of the problems that ensue both for the theorist, practical economist, businessman, and policy advisor. Harcourt's work suggests that we should not aim to replace one monolithic way of seeing things with another, indicating that the useful definition of key concepts and tools is determined by the problem and hence by the policy question one wants to answer.

Keywords. Accounting, economic policy, post-Keynesianism, Harcourt, measurement

JEL codes. B22, B31, M41

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#### I. Harcourt as an accountant economist

"I was very excited to read this wonderful book by Jane because it is such an overlap with my youth. I first heard of her hero, Pacioli, in 1950 in Lou Goldberg's lectures on Accountancy 1A, the aim of which was a terminal course which allowed you by the end to keep the books of the local tennis club. It just so happens that the [accountancy] I learned there guided me through both the research for my undergraduate dissertation and for my PhD and for my second-best known article, which is called 'The accountant in a golden age." (Gleeson-White and Harcourt, 2012: 89)

As the above quote indicates, Harcourt's interest in accounting starts very early in his academic career, and in fact he was first interested in the interface of economics and accounting before he got engaged in the capital controversies which became his most celebrated work. As Geoff and Gay Meeks note, "Geoff's interest dates from his doctoral research on the relationship between historic and current cost accounting- one of the first systematic analyses of the company accounts databank established by the National Institute (Harcourt, 1958)" (Meeks and Meeks, 1997: 91). And yet while his work on accounting and economics has been, according to Harcourt, an important part of his contribution, this aspect of his work remains relatively unexplored, and more so if we consider how it connects with the rest of his work or with broader post-Keynesian themes that Harcourt came to be a central contributor to for much of the second part of the twentieth century and the first two decades of the 21st.<sup>2</sup>

Since G.C. Harcourt's passing in December 2021, a number of articles and remembrances note the nature of his contributions as a researcher, theorist, policy economist and teacher among other things (see: Boianovsky 2022a; S. Cornis, and J. Hawkins. 2022a,

<sup>&</sup>lt;sup>2</sup> In this paper we use the term post-Keynesian economics the way Harcourt (1987) himself defined it which is that "post-Keynesian economics is a portmanteau term which is used to contain the work of a heterogeneous group of economists who nevertheless are united not only by their dislike of mainstream neoclassical theory and the IS/LM general equilibrium versions of 'Keynesian' theory but also by their attempts to provide coherent alternative approaches to economic analysis.... We say 'approaches' because several strands can be identified". (Harcourt, 1987: 924)

2022b; P. Kriesler 2022; D. Russell 2022)<sup>3</sup>. In this paper we intend to review a significant part of his writings during the first twenty years of his academic life, from the early 1950s when he was still an undergraduate in the University of Melbourne to his Cambridge Ph.D. and the first years in both UK and Australia. Harcourt's earliest publications show his interest in accounting quite vividly, and include his first ever book review (Harcourt, 1954), his undergraduate thesis titled, *The "Reserve" Policy of Australian Companies during the Depression. A Study of Oligopoly in Australia over the period 1928 to 1934* (Harcourt, 1953), his master thesis which was titled *Pilot Survey of Personal Savings in Melbourne 1954* (Harcourt, 1955), and his Ph.D. thesis titled *The finance of Investment Taxation, Depreciation, and Retained Profits in Selected United Kingdom Industries 1949-53* (Harcourt, 1959a). In the 1960s Harcourt continued to work on the allied topics of accounting and economic application making both theoretical and applied contributions in a variety of issues that came together, in a way, in 1969, with the publication with Robert Parker of the edited volume *Readings in the Concept and Measurement of Income*, a volume that become so important as a collection of readings that was republished in with a new preface by Geoffrey Whittington in 1986.

The present paper intends to make a contribution in understanding this part of G.C. Harcourt's intellectual legacy. It intends first to offer a historical account of the development of Harcourt's thought on the relationship between accountancy and economics, and second to offer an interpretation on how it fits with his overall research agenda and remains an important contribution for the post-Keynesian approach, especially in the way Harcourt imagined it and practised it. This paper is an exploration of the accountancy theme of his research, but in its relation to the way that Harcourt practiced post-Keynesian economics, and also what this tells us for post-Keynesian economics going forward.<sup>4</sup>

The paper is structured as follows. In section II we discuss Harcourt's early years from his undergraduate thesis to his PhD work and how this formed the basis of an important dimension of his research agenda in economics. In section III we discuss the development of that agenda in the decade that followed and explore how accounting conventions become an important feature in doing policy work in Harcourt's footsteps. Section IV concludes with

<sup>&</sup>lt;sup>3</sup> Also see the contributions by Michelle Baddeley, Amiya Bagchi, Roy Green, Tim Harcourt, PN (Raja) Junankar and Wendy Harcourt in the previous issue of the *Economic and Labor Relations Review*.

<sup>&</sup>lt;sup>4</sup> Michelle Baddeley's contribution explores further the link between behavioral economics and Harcourt's accounting work.

suggestions on a post-Keynesian view of the relation of accounting and economics as an element in the formulation of economic policy.

## II. Geoff Harcourt in the 1950s: The foundations of his theoretical outlook and empirical methodology

It is interesting to note that from his undergraduate, masters' and PhD theses Harcourt had set himself the process that would come to define his later work, and by this we mean the way he would tackle both theory and applied questions. His undergraduate thesis, completed when he was 22 years old, and submitted as part of the final examination for the bachelor of commerce degree in 1953 was titled: *The "Reserve" policy of Australian Companies during the Depression. A Study of Oligopoly in Australia over the period 1928-1934*, and it starts almost mid-sentence with the following line:

"The crux of the matter is found on pages 98 and 99 of *The General Theory* (paraphrasing) that whereas Employment is a function of the expected level of Consumption and Investment, Consumption is cet. par. a function of Net Income, i.e. of net Investment (Net Income being Consumption and Net Investment). The larger the financial provision thought necessary to make before recording net income, the less favourable to Consumption, and therefore Employment, will a given Investment level be" (capitalisation as in original, Harcourt, 1953: 1).

In this, Harcourt's first extended academic writing, we see not only his conversational style that would become his trademark, but also the easiness by which he would put things in his own terms in order to clarify and focus what he thinks the problem is and what he wants to do to resolve it.<sup>5</sup> It also exhibits an important theme of his academic work which is that theoretical

<sup>&</sup>lt;sup>5</sup> It is tempting to suggest that the paraphrasing of the *General Theory* that Harcourt does here runs deeper than simply quoting a few lines of Keynes' words in a more concise manner. Harcourt is at home also in Keynes' conversational style and in the way the *General Theory* sets out simple thought mechanisms of how a process in the economy works and comes to new and perhaps startling policy insights.

questions are important because they have an impact on the real economy. A corollary of that broad statement is that Harcourt's theoretical work is closely linked from the beginning to conventions that are determined and determine the policy environment and have real world ramifications. It is in its capacity and use as a convention that we should look into theory to see if it is fit for purpose or not. The line of the undergraduate thesis quoted above can be read in exactly these terms. The crux of the matter is what is the financial provision that is "thought necessary" before recording net income. The question may seem trivial, an easy applied question of little importance. How crucial could an accounting convention on how firms record net income be to their operation? Harcourt immediately notes that this decision has broad ramifications as it would, to some extent, determine consumption and therefore employment in the economy.

An important insight of the undergraduate thesis is Harcourt's remark that an accounting convention of recording net income which may work well in a stationary economy, becomes a drag in a growing one. He uses an example that he finds in the *General Theory* but, develops it to a broader point. We quote at length:

We have now to examine the aggregative theory as first formulated by Keynes in "The General Theory" ... I propose to paraphrase the explicit references to the problem which I have been able to discover in Keynes' major work.

First, examine an example first given by the author [Keynes] – the case of a house continued to be habitable until demolished or abandoned. If a certain sum is written off its value out of the annual rent which the landlord neither expends in upkeep nor regards as Net Income available for consumption, this provision, whether a part of User or Supplementary Cost, constitutes a drag on Employment all through the life of a house, suddenly made good in a lump sum when the house has to be rebuilt.

In a stationary economy this would not matter since each year's depreciation allowances in respect of old houses would be exactly offset by new houses built in replacement of those reaching the end of their lives in that year; but it is a serious matter in a non-static economy particularly during a period immediately succeeding a lively bust of investment in long-lived capital equipment... (Harcourt 1953: 13)

Harcourt thinks this is not an isolated instance of net income accounting, but a pervasive feature of the modern economy. He writes a few pages later:

The implications we are invited to infer are, I take it, these: that the house example can be generalised to cover the depreciation policy of corporate (and other) economic units in our society; that excessive financial allowance not only reduces the figure of Net Income... but is also not available for the purposes of physical as opposed to financial investment. Hence the net effects on Aggregate Demand... are deflationary and depressive. (Harcourt, 1953: 15)

But a theoretical investigation of the problem of net income accounting is, in itself, incomplete, because without an idea of how big the problem is in the real economy it is impossible to say anything useful about it. Harcourt adds:

It is not enough to say that excessive financial provisions have been made. To find the net effect on Employment we must find out in what form these "reserves" are held by firms (or whether they are merely Book entries, having no physical counterpart). (Harcourt, 1953: 15)

He adds a footnote, explaining that accounting values have a complex relation with economic values and this was sometimes not even fully appreciated by Keynes himself!<sup>6</sup>

This touches on one of Keynes' weakest points. Because of his abhorrence of an excessive "propensity to liquidity" he seems to have developed a particularly naïve notion of the concept of "Hoarding", continually giving the impression that large stores of liquid funds are to be found in the accounts of most economic units. In actual fact, this is not always so – and very rarely for his reasons; many figures in Balance Sheets are merely Book Value results of the principles of accounting."<sup>7</sup> (Harcourt, 1953: 15, n. 29)

This criticism of Keynes, and Keynesian theory remains an important open question. Are recorded values merely artificial book values of prevailing accounting techniques without any substantial economic significance and, by extension, recorded instances of hoarding are only a bookkeeping mirage? Or, as Keynes and later Keynesians assert, these accounting values are indications of hoarding from which we can infer shortfalls in effective demand?

<sup>&</sup>lt;sup>6</sup> It is no surprise that John Hatch and Ray Petrides write: "By his fourth year at university he was clearly brimming with confidence, and this is discernible in the exuberant, assertive and almost brash style in parts of the thesis." (Hatch and Petrides, 1997: 3)

<sup>&</sup>lt;sup>7</sup> Harcourt thanks Professor Prest and Mr. Alan Barton for this point.

Harcourt's answer is to investigate in what form these reserves are held in, and it remains a good answer in resolving some of these questions.<sup>8</sup> To this Harcourt adds another complication in the mix: the fact that modern product markets are rarely approximated by the perfectly competitive model. Instead, oligopolistic markets and oligopolistic behaviour further complicates the picture, as now firms do not behave in the simple – almost static – profit maximising way that economic theory would find as natural for survival. Instead, the effort to dominate and control, creates the conditions for price war, and price war is a situation that transcends the then available tools of economic analysis. Harcourt writes:

The aim of a price war is annihilation; the actual result is more usually new agreements and further quiescent policies. There must finally be included in the picture "non-economic" forces (within the conventional bounds of economic study) such as political actions, legal help – all consistent with the desire for secure profits (Harcourt, 1953: 11).

Thus, outside the rarefied environment of a simplified competitive market<sup>9</sup>, firms exhibit complex behaviour and dynamic objectives. In this mix the legal framework, and the accounting rules, are not inert compounds or irrelevant asides to competition, but central forces that shape the economic environment and determine the institutional framework in which firms operate.

Harcourt's thesis is an impressive achievement by any standard for someone just starting their academic career. It not only contributes a complex set of questions but, attempts to do empirical analysis by looking into company accounts. The result of the empirical analysis is somewhat impressionistic and the conclusions of the thesis modest. Harcourt writes: "The most I can claim to is this: that a rather minor point of Keynes' original analysis has been shown, at least under Australian and oligopolistic conditions, to have been, not logically wrong, but factually misleading; and that by combining micro and macro analysis I have produced a

<sup>&</sup>lt;sup>8</sup> This admits that not all forms are equivalent, and therefore accounting conventions by themselves are not merely window dressing but constitutive features of the system. Furthermore, this opens an interesting agenda of how economic theory and accounting convention relate in the development of modern economics.

<sup>&</sup>lt;sup>9</sup> Harcourt writes of the incompatibility of Keynesian theory with perfect competition: "Keynesian theory falls down when tracing back effects of aggregate movements on individual economic units, due to the acceptance of a simplified competitive market facing each entrepreneur." (Harcourt, 1953: 5) This has also been noted in Harch and Petrides (1997: 2-3) as one of the basic themes of Harcourt's work that starts with his undergraduate thesis and occupies him throughout his life.

slightly different way of looking at certain facts over the [Great] Depression years" (Harcourt, 1953: 93). He stated only a page later: "I am conscious of the limitations of the empirical analysis and my reasoning powers" (Harcourt, 1953: 94). And although the empirical methodology is limited for the broad set of questions he sets up to answer, the questions and the theoretical answers they give rise to remained foundational for his work over his lifetime.

That theoretical core may be summarised in the following fashion. If we dispense with the assumption of a static, almost ahistorical abstract conception of the firm, we observe that firms make decisions and operate in institutional environments in which certain conventions are observed – one of the most important is how they count net profits. If the environment in which firms operate is not the closed and unidimensional environment of perfect competition – where firms maximise profits and reduce production costs to the most efficient level with the market price policing the system, so that any firm that strays from this objective goes bankrupt – and instead we admit that firms operate in a complex environment where increasing profits is an ultimate but not necessarily an immediate objective, we realise that economic behaviour is not separable from the conventions that structure the market environment. These conventions, then, can have aggregate effects on employment, effective demand and the overall stability of the system.<sup>10</sup> An immediate corollary of this broad agenda is that the way firms account for profits becomes an important factor in guiding firms' behaviour and, at the policy level, government action when interfering in the market and especially taxing profits. This,

<sup>&</sup>lt;sup>10</sup> It is interesting to observe that Harcourt criticized Keynes' disparaging views on hoarding by arguing that confidence in the economy may require that some excess reserves are held and these do not bring aggregate demand down, but instead are factors that stabilize it and act as supports for full employment. According to Harcourt, "the reduction in Effective Demand due to a decrease in orders from creditors and reduction from trade credit is not due to 'financial prudence' in the sense in which Keynes uses it, (i.e. through a reduction in Net Income and hence Consumption without the corresponding increase in physical Investment) but from the necessity for a firm to maintain a 'sound' asset-liability ratio and also presumably to have drawings on purchasing power as soon as demand conditions warrant increased stocking. After all, idle funds at the bank may be a depressive influence during a depression, but a 'sound' financial state must surely be more conducive to maintenance of confidence under depressed conditions than a foolhardy policy which greatly increases the chance of bankruptcy which would mean no employment at all" (Harcourt 1953: 16-17). Thus, Harcourt uses what would become a Keynesian theme of the instability of conventions of credit worthiness of companies - and the need of them to appear (not only to be) 'sound' - to explain why it may actually be dynamically efficient to have some hoarding. This does not deny the Keynesian world view, as it is entirely possible for hoarding, seen as a private vice, to become a public virtue in the form of systemic stability. However, it does show how difficult it is to ascertain motives and behaviour from data. The same firm data may be manipulated to fit different theoretical schemes, something Harcourt became aware of from the start of his career.

again, can have aggregate effects. An accounting convention that underestimates or overestimates profits for firms when, e.g., there is inflation or deflation, would produce different cumulative effects.

This research question, in broad terms, became the foundation of Harcourt's Ph.D. thesis in Cambridge. The difference is that the Ph.D. thesis displayed the focus and clarity of a more mature work, eschewing some of the broad generalisations of the undergraduate thesis and analysing in clearer terms the problem of defining net income, coupled with more extensive and robust empirical analysis. Harcourt's increasing ability to frame effectively empirical questions was an outcome of his master's thesis, which developed a methodology applied to a pilot survey of family savings in Melbourne in 1954.

In his master's thesis he not only discussed the American and the UK experience by developing a sampling technique to understand consumption and saving behaviour of individuals from different parts of society, but also advanced definitional issues for terms such as saving, income and consumption, that are central to theoretical and empirical analyses. What is revealing is that definitional and sampling design issues are not asides hidden in an appendix while presenting what empirical fundings he has collected, but are the central contribution of the thesis. The remit of the assignment is to design a framework for data collecting that performed well on three principles: (1) it produced reasonably accurate results, (2) data collection could be performed in a reasonable time frame and, (3) the cost of running the scheme was not excessive. Furthermore, we find in his master's thesis an important realisation that would be a defining feature of his later thinking: that data collecting is essentially story creation, as no data can be collected without some end use in mind. He writes revealingly:

The general aim was to obtain data on saving, liquid asset holdings, and consumption habits. To make this collection more than an uncollected mass of facts, the investigation was approached with assumptions of what variables would be interesting for economic theory. Consequently, such characteristics as the income (net and gross), occupation, industry, region, age, sex and marital status of the head and members of income units are used continually in the classification and analysis of the findings (Harcourt 1955: 6).

This completes the three axes on which Harcourt's master's thesis was based, as necessary pre-requisites for constructing useful data sets and doing empirical analysis: 1) discussions on

the definitions of terms with reference to strengths and limitations,<sup>11</sup> 2) discussions on the sampling method and its strengths and drawbacks on capturing relevant data and, 3) the broad framing of this exercise by being aware that data is, ab initio, collected for a purpose, and the need to be aware of the framing that happens at the very beginning of this exercise and the limits of what can be said. And finally, a fourth consideration, which is the ethical issues that arise as part of data collecting.<sup>12</sup> This marrying of explorations on theoretical definitions with sampling technique issues, broad framing of the problem and moral considerations is a key feature of Harcourt's political economy approach of doing economics that became a distinctive feature of his approach and has here its first full articulation.

In 1955 Harcourt arrives in Cambridge to start his PhD and write a thesis on profit accounting in UK industries, and the ramifications accounting conventions had both on the behaviour of firms and on economic policy. The main problem that Harcourt identifies is that companies, based on accounting conventions, would use historical cost when deriving net income (i.e. revenues from sales minus cost outlays), but historical cost (i.e. the cost of machinery at the date of purchase) would not necessarily equal the cost of replacing this machinery today. On top of that there is the problem of depreciation of machinery over time. Accountants use specific methods to account for the depreciating value of capital in the firm (usually straight-line method or reducing-balance method).<sup>13</sup> Although these are based on

<sup>&</sup>lt;sup>11</sup> An example of these discussions can be found in the following quote, where Harcourt both admits the theoretical issues involved in defining income and the fact that the survey aimed at capturing an element of it: "The next question is the definition of 'income'. Professor Hicks discusses this subject exhaustively in Value and Capital, where he concludes that income, as an economic quantity, is statistically immeasurable …. But Hicks is discussing a concept that involves considerations of 'real' quantities and the treatment of the role of expectations, and this concept is measurable only in principle. The surveys, however, are concerned with individual money flows, measurement of which is quite practical. Hence their aim has been to obtain a definition understandable and meaningful for the purpose of flow analysis, and at the same time measurable and comparable with other measures, for instance those used by the Income Tax Commissioners" (Harcourt 1955: 28-9).

<sup>&</sup>lt;sup>12</sup> Harcourt stresses both the responsibilities and the rights of a citizen in a democratic society. Thus, citizens have a right to privacy, but also "a duty of a good citizen to give access to this information" [which is of a personal/family nature and may be sensitive] (Harcourt 1955: 95). Thus, the problem is one of balancing rights and responsibilities for the common good. Harcourt finds that "having regard to the work of the economist, the statistician, and the economic policy maker in democratic society, it is fair to endorse their validity" [the reasons for collecting data for economic policy is to ensure full employment, rising living standards and other ends] (Harcourt 1955: 95).

<sup>&</sup>lt;sup>13</sup> As Harcourt explains: "With the straight-line method, the asset is assumed to depreciate by a <u>constant</u> amount each year; with the reducing-balance method it is assumed to depreciate by

standardised conventions, they may not reflect either the productivity changes of the machinery itself, nor the changing market valuation of used machines over their productive lives. Thus, economic costs – as measured by concepts such as current market replacement cost or opportunity cost – and accounting cost – as measured by accounting conventions that takes account of original historical cost and a specific shape of depreciation – would be out of joint. The problems this could cause are many and varied, not only by the firm taking economic decisions based on the wrong information (under-saving to replace capital due to using accounting cost instead of economic cost), but also by the government when designing taxation policies or other market interventions.

What mirrors Harcourt's earlier undergraduate thesis is the understanding that this problem arises in a dynamic system and, not significantly (if at all) in a static one when there are no price changes. It makes sense to argue that in a static society even if accounting norms were imperfect in capturing depreciation rates of machinery empirically, by the very nature of being in a long run equilibrium static position, managers would have found out what they need to save in order to simply replicate their current machinery needs, and would, in time, have rendered a problematic convention itself redundant if it survived at all. But as Alfred Marshall nicely pointed out, "the fact that the general conditions of life are not stationary is the source of many of the difficulties that are met with in applying economic doctrines to practical problems" (Marshall, 1961 (variorum edition vol. I): 347).

When there are dynamic factors – such as business cycles, growth, technological change, inflation/deflation periods, etc. – then a reversion to a simple heuristic of equating the concept of the "cost of production" with what was actually paid when capital was bought runs into trouble, as a cleavage opens between what neoclassical economists see as costs in an evolving economy and what the accountants attempt to measure. For this reason, adjustments need to be made, which would be a way to approximate the current economic cost of capital goods and stocks. Harcourt estimates capital consumption at current replacement cost by multiplying the historical cost depreciation allowance of each fixed asset by an "inflation factor"  $\frac{P_c}{P_a}$  where Pc is the current price of the asset and Pa stands for its price at the date of acquisition. For stocks

a constant <u>proportion</u> of its written down value each year (except the last), of its estimated effective working life." (Harcourt 1959a: 7)

that appreciate in value, the difference between the value of the stock over the year and the stock accumulation of the year were calculated.

It is, however, important to stress that these "adjustments" are approximations themselves. Harcourt makes several assumptions to be able to approximate 'better' economic costs: first that firms want to keep their real capital intact – a behavioural assumption or a first approximation that makes the problem tractable. Then the "assumptions that the productive efficiency of assets declines in the way implied by the method used to charge depreciation, and that the effective working lives of the asset have been investigated correctly" (Harcourt 1959a: 12).<sup>14</sup> This means that its own cost accounting is not an infallible guide to economic cost, but simply an improvement to the current accounting convention exactly because the economic environment has changed and requires new methods. As Harcourt points out, "this method is a practical way of estimating the opportunity costs of the fixed assets 'used up' in the year's production" (Harcourt 1959a: 12).

Thus, concerning Harcourt's first ten formative years in Melbourne and Cambridge we can say the following. Harcourt's work on accounting not only opened up serious theoretical and practical questions on the link between economic theory and practice but, developed tools on improving accounting conventions to deal better with the current economic and social problems, especially in relation to economic policy. He writes in his PhD thesis that:

[the problem relating to current accounting conventions] has been believed and stated by the financial press, company chairmen and businessmen generally. They have argued that the depreciation allowances of firms and the statutory normal 'wear and

<sup>&</sup>lt;sup>14</sup> And we could add more things to the list, some which Harcourt does not explicitly mention in his PhD thesis. What happens for example with capital goods that have for some period unobservable prices because their markets are specialized and fragmented, so that actual prices are observable only when replaced? Or aren't general price level indexes too rough to guide us at replacement cost across industries or even within them? Bigger producers may be able to have different replacement costs to smaller ones for a variety of technical or market power reasons. The list can be quite big – and it is also immaterial because Harcourt notes the main issues. But at a fundamental level it points to two things. First, that calculating a detailed economic cost for the various capital goods and stocks may be itself a time consuming and expensive activity which would defeat the purpose of the exercise (if too many resources are tied up in just calculating costs). And second, this is so because the spot price/economic cost of a good is itself not always a directly observable price, especially when wear and tear are also considered, so that no direct market valuation may be easily identified. Reconstructing this valuation has a cost and, depending on the use of this reconstruction, there may be incentives problems as well.

tear' allowances of the Board of Inland Revenue have not been great enough to cover replacement expenditure on fixed assets; that in the inflationary situation of the postwar years, conventional accounting methods have not been able by themselves to ensure that physical capital has been maintained intact; and further, that the greatest increases in prices of assets generally, coupled with heavy taxation on an inappropriate tax base, have been causing shortages of internal funds (Harcourt 1959a: 61).

In short, Harcourt noted that accounting conventions, by the very market participants that they were supposed to serve, were misguiding public policy and their own business decisions. More specifically, Harcourt's interest in how to deal with inflation when firms use historical cost accounting would become a central concern in the decades that follow in the accounting literature and an important part of training to be an accountant.<sup>15</sup> Harcourt deals directly with the effects of cost push inflation in one of his first publications (Harcourt, 1959b) where he combines "the models of profits and income under alternative pricing policies of *Inflation and Company Finance* [Mathews and Grant, 1958] and the model of *The Accumulation of Capital* [Robinson, 1956]" (Harcourt, 1959b, 133).<sup>16</sup> He shows that with unemployment present, historical-cost accounting and current-cost accounting have different distributive and aggregate

<sup>&</sup>lt;sup>15</sup> Harcourt's work took place at a time when inflation had started to make a sustained presence in developed countries and the accounting literature had to come to terms with it. An indication of the pulse of the times is Russell Mathews' comment in 1960 that "the great inflation of the last twenty years has caused, if not a revolution in accounting thought, at least a civil war among accountants. Since accounting is concerned so much with valuation, it is perhaps surprising that we have been able to shelter for so long behind the fiction that price level changes may be ignored for accounting purposes" (Mathews, 1960, 8). Alas, that fiction as Mathews notes, was at an end. As an anonymous referee to this paper notes, accountants' interest in inflation accounting took off from the mid-1960s, with attempts by the accounting profession to introduce inflation accounting standards based on either general price-level adjustments or on current cost valuation during the 1970s. Inflation as a problem became a standard topic to teach in accounting in the 1970s and 1980s until inflation abated by the 1990s. Although a description of the evolution of the accounting literature on inflation is beyond the scope of this paper, the interested reader may look into Whittington (1983) and Tweedie and Whittington (1984), which provide an authoritative account, and more recently Whittington and Zeff (2001) which focuses specifically on the contributions of Russell Mathews, Reg. Gynther and Ray Chambers, the celebrated Australian accounting theorists and their work on inflation accounting. The topic is also addressed in Harcourt and Whittington (1990). A recent intellectual biography of Ray Chambers by Clarke, Dean and Persson (2018) gives more information on the period. Finally, Napier (2010) provides a history of the development of financial reporting in the United Kingdom with an extensive bibliography for further reading.

<sup>&</sup>lt;sup>16</sup> This shows again Harcourt's interest in combining economics and accounting literatures in his early work.

demand effects, with historical cost accounting having a greater expansionary effect in the economy.

Thus, Harcourt's goal during that period was to understand the effects different accounting conventions had both at the firm decision level and in the macroeconomic environment. In general, he traced through the effects suggesting adjustments to the conventions to be able to perform their function better, being fully aware that his proposal was also an approximation, but an approximation that allied in a more efficient fashion economic thinking, accounting practice and policy needs of his day. It is this mind-frame, that guided his published work on the links between accounting and economics over the next ten years, that we turn to next.

#### III. From 1959 to 1969: Harcourt's accounting golden age

Harcourt's first publications came during the time when he was still a graduate student (1954, Harcourt and Ironmonger 1956, 1958, 1959b, Barton and Harcourt, 1959). In fact, in his Ph.D. thesis he notes that "an article based on chapter 5 was published in *Accounting Research* [Harcourt, 1958] and a note based on part of Chapter 7 was published in *The Economic Record* [Harcourt, 1959b]" (Harcourt, 1959a: 1). The article with Duncan Ironmonger (Harcourt and Ironmonger (1956)) relates to his work in his master's thesis.

It was during the next decade that Harcourt wrote extensively on accounting and its relation to economics. He produced a number of publications (Harcourt, 1961, 1962a, 1963a, 1964b, 1966a, 1966b, 1967, 1968a, 1968b, Bennett and Harcourt, 1960), but his article on the accountant in the golden age (Harcourt, 1965a) as well as a collection of essays on readings in the concept of measurement of income – together with Robert Henry (Bob) Parker (Parker and Harcourt, 1969), who was one of the most important academic accountants of his generation (see Nobles, 2016) – stood out. By the late 1960s Harcourt started devoting increasingly his attention to the capital theory controversies (Harcourt 1969) and the writing of his book (Harcourt, 1972) which made him famous<sup>17</sup>. It was in the mid 1960s that, according to

<sup>&</sup>lt;sup>17</sup> This is not to suggest that Harcourt had not contributed extensively to economic theory during the 1960s as well. A number of important publications during this period (Harcourt 1962b, 1963b, 1964a, 1965b, Harcourt and Massaro, 1964) as well as his first book *Economic* 

Harcourt, he produced his second most well-known paper (Harcourt 1965a), which was formative, to some extent, to his thoughts on empirical questions and policy.

Harcourt's (1965a) article addressed a core question of his graduate investigations which was not tackled directly there. This is, would an accountant measure profit accurately even under the extremely idealised conditions of a Golden Age, meaning a situation when "uncertainty is absent, expectations are fulfilled, and the rate of profit has an unambiguous meaning" (Harcourt, 1965a: 310)? And by accurately he meant something simple but also very precise, that is, the *ex post* rate of return equals the *ex ante* one, or to put it in other terms, the convention the accountant is using proves to be yielding right predictions which are usually fulfilled in a stable economy. Harcourt finds this question not only to be important as a matter of pure theory, but as a crucial empirical and policy issue. He notes that empirical estimates by economists use accounting figures, which would then be leading them astray: "if it can be shown that the measure is faulty even in the equilibrium conditions of a 'Golden Age', it is unlikely to prove a realistic measure in real world situations" (Harcourt, 1965a: 311).<sup>18</sup>

Harcourt's main finding is that the "accountant's measure of the rate of profit is misleading, even under 'Golden Age' conditions" (Harcourt, 1965a: 311). He comes to this conclusion by investigating four distinct 'Golden Ages', first that of a stationary and a growing economy where capital is held as a physical asset, and second by introducing also financial assets held by firms. He then divides each case to four subcases where the decline of productivity of machines over their working life takes different shapes. The outcome of the exercise is a negative one both on how well the existing straight line and reducing-balance accounting depreciation rules approximate what the economist would see as the right value,

*Activity* (with Karmel and Wallace, 1967) are central in the theory developments in relation to capital theory and teaching of Keynesian macroeconomics. However, there is a shift of focus over time culminating in 1969 with his Cambridge controversy article in the *Journal of Economic Literature* (Harcourt, 1969) and its extended version in book form (Harcourt, 1972). See also Boianovsky 2022a and 2022b.

<sup>&</sup>lt;sup>18</sup> It is worth noting that Harcourt does not say it is *impossible* that it is a good measure in the real world but *unlikely*. This is important because it points to the belief that we cannot extrapolate from idealized conditions the conventions which may be useful in complex realistic situations. We can make guesses, and these guesses take the form of alternative abstract exercises. Harcourt (1965a) is one such baseline analysis, an exploration of the convention in a specific kind of idealized system. The fact that the convention falls short in this stylized environment shows that it probably underperforms for what it is used for in the real world. But the problem of finding better conventions, although a related problem, is analytically a separate one to finding the shortfalls of the existing conventions.

but also because there is no simple general fix that would improve in general the accounting convention. Harcourt hoped that "some rough 'rules of thumb' might be developed' and that these would allow accounting rates of profit to be adjusted for the lengths of life of machines, the patterns of quasi-rents, rates of growth, and the method of depreciation used. However, it is obvious for the calculations that the relationships involved are too complicated to allow this (Harcourt, 1965a: 324). Which means that simple adjustments that could be practicable and offered as alternatives in general could not be devised even in golden age conditions.<sup>19</sup>

This result signals a shift from his approach in his PhD thesis, where adjustments were used in empirical analysis even if it was clear that these were not general solutions to the problem. The 1965 result is more sobering as it shows that the problem is much deeper than a simple inefficiency of the conventions currently in use which can easily be fixed. And, as Harcourt notes in a revealing passage, in real conditions such situational comparisons as we can perform in golden ages would not even be possible. He writes "...the article is concerned with what would happen if he [the accountant] were to use his customary box of tools in 'Golden Age' conditions. In non-'Golden Age' situations, the only way of finding out whether expectations concerning rates of profit have been realised is to ask accountants – or use their tools" (Harcourt, 1965a: 313). This realisation shows that, even under the weaker assumption of the family of well-defined stable economies without any of the real-world complexities, general 'better' rules cannot be easily found, and that is before we even start extrapolating to the infinitely more complex condition of real markets.

What are we left with then? Simply the negative result that the convention is problematic but that it cannot be generally improved upon? We think that Harcourt's other articles during this period give us a provisional answer which has deep links with his Keynesian beliefs and thought. We are left with doing situational analysis and trying to find rules as imposed conventions given the data we have and can collect, the state of what we know and can imagine, and the theoretical or policy question that we want to investigate. The mosaic of solutions and suggestions to policy questions is an outcome of this strategy of tackling problems. Harcourt's different writings explore alternative trains of thought and analytical

<sup>&</sup>lt;sup>19</sup> The links of this outcome as expressed in this publication (Harcourt, 1965a) with the capital controversies is an interesting issue. Although it is beyond the remit of this paper to develop this link, it is worth noting that the time structure of the quasi-rents of the machines (or physical capital) are part of the drivers of this result of making any simple general 'adjustment' to the accounting rules very difficult to find or implement. On the links between Harcourt 1965a and Harcourt 1969 see also Velupillai 2017: 1006.

avenues without making any claim that these synthesize a picture that must conform to a general case. What connects these approaches is not the analytical conclusions but the tools that are used – different shapes of quasi-rents, different types of accounting rules, different kinds of capital structures, etc. All these abstract assumptions that economists customarily deploy are the tools to be used to answer specific questions that are posed in the theory or policy realms. This is how Harcourt saw economics in general. He writes, together with Karmel and Wallace, in the preface to their undergraduate textbook *Economic Activity*:

This book is written in the belief that economists are best trained by an early introduction to economic theory. Once the student attains a certain level of skill in the manipulation of theoretical models, he can proceed to the real work of an economist – the examination of new problems with the aid of a theoretical model developed specifically for the purpose. Students at the University of Adelaide were encouraged to regard economic theory as a 'do-it-yourself construction kit' (Harcourt, Karmel and Wallace, 1967: v).

Examples of this approach may be found in Harcourt's various publications during this period, especially when discussing specific public policy questions. In Harcourt (1966a) he mentally crosses into the Iron Curtain to discuss how the measurement of the rate of profit affects the bonus scheme for managers in the Soviet Union. He shows that if you have two competing ways to produce a stream of goods – both of which have constant expected quasi-rents associated with the machines in each process, same lengths of life, same productive capacity per year, with one process having greater annual costs than the other – the more expensive (and therefore inefficient) process yields higher bonuses per unit of capital for the managers! This shows the kind of perverse incentives that can arise from the use of accounting conventions in a system, and the real problems policy actions (even when well meaning) may give rise to.<sup>20</sup>

Harcourt (1967) compares both sides of the Iron Curtain, by contrasting the rules that would indicate to the decision-makers in an enterprise which choice of technique to use.<sup>21</sup> He

<sup>&</sup>lt;sup>20</sup> Harcourt indicates that such kinds of incentive problems do not only plague planned economies but are a feature of complex production economies in general. He writes, in his unique style: "It can be seen that if machines are 'one-hoss shays', managers in charge of longer-lived machines get greater benefits, in relation to the capital invested, from the bonus scheme .... Can any welfare theorist, either side of the Iron Curtain, say why this should be so?" (Harcourt, 1966a: 60-61).

 $<sup>^{21}</sup>$  He considers five rules, which are: 1) present value criterion, 2) internal rate of return criterion, 3) pay-off period criterion, (which essentially is choosing the technique with the

finds that "in many instances, businessmen in the United Kingdom would install more capitalintensive techniques than would managers in the socialist countries with the same expectations and the same technology" (Harcourt 1967: 137-8). This for Harcourt is the outcome of government policy and the accounting conventions that the decision-makers of the two blocks of countries were essentially using when making decisions. In fact, he notes that in the UK academics and government economists were advocating for more use of the discount cash flow procedure which may result to a "switch to investment in less capital-intensive techniques than otherwise would have occurred" (Harcourt, 1967: 138).

The question of public policy and investment-decision criteria for the UK is even more directly addressed in Harcourt (1968a), as he was invited to write specifically on policy recommendations for the UK and submit it to the *Economic Journal* given his earlier (Harcourt, 1967) article.<sup>22</sup> Together with Harcourt (1965a), this was his most formalized piece of analysis. Returning to the capitalist side of the Iron Curtain, Harcourt (1968a) discusses in more detail the policy ramifications of the UK's government decision to "educate' businessmen by encouraging them to adopt certain 'correct' rules of investment proposal." (Harcourt, 1968a: 77; both *educate* and *correct* are in quotation marks indicating that Harcourt was using the language of the policy makers not necessarily agreeing with it). He noted that successive British governments had implemented policies to encourage investment expenditure through fiscal initiatives. Harcourt placed the push for this new convention (the discounted cash flow) as part of this overall effort i.e. to "result in the choice of more capital-intensive techniques than otherwise would have been the case" (Harcourt, 1968a: 78). Thus, according to Harcourt, the British government saw the change of the accounting convention not only as a move towards more up-to-date practices, but also as achieving specific capital formation objectives it finds desirable. However, as he shows in the EJ article, the combination of taxation and fiscal incentives is intricate and may produce, under certain conditions, the opposite to the desired

highest expected net receipts over the pay-off period) 4) rate of profit criterion (which depends on highest average accounting rate of profit) and 5) recoupment period criterion (in which the sum of average operating costs per year and investment outlay averaged over the standard recoupment period is least). Harcourt associates the first four rules with capitalist economies and the last with a socialist one. His main finding is that "in general, the relative capitalintensities of the techniques chosen by the present value, internal rate of return, accounting rate of profit and recoupment period criteria cannot be ordered" (Harcourt, 1967: 138). This conclusion adds to Harcourt's (1965a) result that it is impossible to find general rules of thumb that can always be applied to these questions without regard to context specifics.

<sup>&</sup>lt;sup>22</sup> This information was communicated in a private discussion in October 2019 between Geoff and C. Repapis.

effect. Thus, accounting rules and any institutional push for changing them should be investigated as part of a policy package that may include fiscal, monetary and taxation instruments in the service of a specific economic outcome.<sup>23</sup> Institutional framing becomes part of policy design to achieve the objectives.

Harcourt's second most important work on the link between accounting and economics, after his accountant and the golden age *OEP* article, is the collection *Readings in the Concept and Measurement of Income* that he edited with Parker in 1969. The introduction written by Parker and Harcourt is a tour de force not only for presenting the various readings and their interconnection but as an indication of how readers should be initiated in this literature and what conclusion to draw from it. The volume organises the articles in six sections that covers first definitions (I. concepts of income), then a discussion on these very definitions (II. income and the maintenance of capital intact), then III surveys on the economists' views on income, followed by discussions on how to measure business income (IV. measurement of business income), problems of measurement and depreciation (V. depreciation) and finally the construction of national income and its issues, addresses problems of theory and measurement and in the end presents new developments in measurement and accounting.

The reason for such a complex scheme is that "there is no reason to suppose that there is only one useful concept of income. Even a cursory glance at the contributions to this book suggest that there are many possible concepts" (Parker and Harcourt 1969: 4). This further illustrates how Harcourt generally worked in order to do economic policy work. He thought of the relevant framework, from the definitions to the abstract theorising, which was to some degree dictated by the policy question. This required substantial work by both the economist and the accountant and a new mind frame to what they may be trained into. Parker and Harcourt acknowledged this problem while asking the following question:

<sup>&</sup>lt;sup>23</sup> Harcourt notes that "If the *present-value rule* is used, the change from the old tax system of profits tax and the standard rate of income tax combined with investment and initial allowances to the present tax system results in the choice of *less* capital-intensive techniques than otherwise would have occurred" (Harcourt, 1968a: 94). This also follows when using the *pay-off period criterion*, but the opposite holds when using the *accounting rate of profit rule*. This shows that the results of any policy tax aiming at capital deepening are conditioned on the accounting conventions of the time, not only quantitatively, but also at a qualitative level, as the opposite effect may be achieved with the same tax system change and a different accounting rule.

It is worth pausing at this point to remind ourselves that the 'accounting profit' which we regard as the least useful of the concepts discussed is, however, the dominant one in accounting practice. Why have accountants been so reluctant to adopt another concept? There are at least four possible reasons.

(i) Accountants are 'practical men and like most practical men they tend to repeat the mistakes of their forefathers' and to avoid solving theoretical problems.

(ii) In most countries historical cost is used for taxation purposes.

(iii) The practising accountant can legitimately complain that the critics of historical cost have failed to agree among themselves as to the alternatives which should be adopted.

(iv) But what makes most practicing accountants (and some academic accountants also) cling to historical cost is the fear that although published financial statements might gain in relevance they would lose their present objectivity (Parker and Harcourt 1969: 15-16).

It seems the reasons the professional accountant is against abandoning accounting cost is close to the reason the professional mainstream economist is against abandoning the key neoclassical paradigm. They are not comfortable in dealing with deep uncertainty if they abandon the baseline model and there is no single way forward to replace the current paradigm. But maybe the answer is not to replace one monolithic construction with another, but to start developing families of tools that do not give the same answer and then discuss and debate which tool is more useful for the policy or theory question we want to address. This, of course, means that we are also to accept another form of uncertainty, that which indicates that the tools we have and use for policy analysis and valuation are conventions that we have constructed because they are useful and, are of use as long as they are useful and give acceptable solutions to social problems. Objectivity in the use and application of tools, if it exists at all, comes from wider social acceptance of the methods and outcomes of this process, and the professional accountant as well as the professional economist can appeal to no higher authority than that. Harcourt would come back to that in his joint chapter with his Cambridge colleague G. Whittington (see Harcourt and Whittington 1990), which may be regarded his last significant contribution to the relation between economics and accounting – appropriately written by an economist and an accountant, with special attention to the problems posed by inflation.

#### Conclusion

In Mrs Robinson's celebrated article, 'The production function and the theory of capital', it is not made clear whether the 'man of words', whose doings are contrasted with those of the 'man of deeds', is an economist or an accountant. (Harcourt 1965a: 310)

Harcourt's work as an economist with accounting sense is nicely illustrated by this quote – the assumption of whether the man of words is an economist or an accountant has both theoretical and practical significance. In the 1965 *OEP* article, the basic argument is that the man of words has to be able to speak both languages and see which language to speak to the man of deeds depending on the situation. The questions posed in 1965 remain unresolved and, continue to be an important contribution to the literature to this day. Whittington noted that "it should be apparent that the debate initiated by Harcourt (1965a) has been substantial and continues to be important. It is far from being resolved, but it has led to important insights into the relationship between accounting numbers and economic decisions." He added that this discussion is "of great practical importance for the functioning of market economies in general, and for the work of the regulators in particular" (Whittington 1997: 106). Whittington pointed out that Harcourt made an "extremely important contribution to bridging the gap between economists and accountants in the related areas of income measurement and the measurement of the rate of return" (Whittington 1997: 97), with significant implications for the methodology of economic policy making.

Our reading of Harcourt's contributions in that area suggests that his thought points to another solution than simply trying to find useful approximations until an ideal standard is revealed and resolves those problems. Historical analysis shows that capitalism developed in part because of the creation of conventions that allowed for its development. Thus, while in his earlier work Harcourt may have chided the accountant for being out of date with the needs of the manager and the economist, later in life he reminded the reader that without the accounting revolution of double entry bookkeeping the age of the manager and of the economist would not have come. He agreed with Jane Gleeson-White who ".... argues that without double-entry bookkeeping you wouldn't have had capitalism and without capitalism you mightn't have had double-entry booking. There was a mutual determination process going on" (Gleeson-White and Harcourt, 2012: 89). Therefore, Harcourt's eventual answer to the original question of what should replace the accounting rate of return, that started him in his research journey, is different from what he originally envisioned. His answer is not the replacement of one dominant convention with another one, but with a box of tools that both accountants and economists should learn to use and apply depending on what policy question they need to answer. To take a broader historical view, the creation of double entry bookkeeping was revolutionary in creating a standard of accounting that allowed not only the more practical and 'correct' recording of accounting values, but also a shared practice that through standardization allowed the comparison of values across businesses and borders.

Nevertheless, Harcourt's work seems to indicate that we have hit another wall. The use of a single rule that allowed the progress and standardization to answer a host of questions now seems to be a constraining noose creating a host of problems. At one end this cannot mean a return to incommensurable private practices across businesses and firms that may have been the norm of previous times; at the other, one measure to provide answers to all essential business or policy questions seems out of reach. Harcourt's answer seems to be the joint training of economists and accountants through a toolbox of common tools. The use of argument on the appropriate use of some rule to answer specific questions given the relevant context may be a way forward. The creation of professional communities able to interpret and debate processes based on the development of different tools, common understandings and values seems to have been his suggested solution to this dilemma.<sup>24</sup> Our reading of his early work is an attempt to bring together his writing on accounting with his broader research programme<sup>25</sup>, general beliefs<sup>26</sup>, his views on pluralism and community building in research

<sup>&</sup>lt;sup>24</sup> The academic literatures of accounting and economics remains fairly distinct today as they had been during this period of Harcourt's original work in the 1950s-60s, so this suggestion for further combined work remains relevant. However, there have been modern efforts to introduce new links not only to aid the economist but also the accountant. For example, recent work (see Ball and Sadka 2015, Ball, Sadka and Tseng 2022) explores the importance of macroeconomic indicators by users who traditionally focus only on firm specific data, to examine capital market implications of earnings and other accounting variables.

 $<sup>^{25}</sup>$  See, for example Harcourt (1999), where he advocates a "horses for courses" methodology to answer questions in economics. In some ways the present paper argues that that approach – which became Harcourt's methodological approach throughout his career – started partly from his work in accounting and the way accounting logic influenced him on how he thought about economics.

<sup>&</sup>lt;sup>26</sup> See Avi Cohen's comprehensive afterword in the 50 anniversary (second edition) of Harcourt (1972) (Cohen, 2021).

and teaching<sup>27</sup>, together with aspects of his policy work, which forms an important part of his legacy to the profession.

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