Keynes v. Hayek, Again

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Followers of Austrian business cycle theory (ABCT) often attribute the fact that John Maynard Keynes seemingly bettered Friedrich Hayek in their debates in the 1930s to a combination of two factors. On the one hand, Keynes was able to give policy recommendations to policy-makers at a time when they were anxious to "do something", i.e., the midst of the Great Depression. Hayek's recommendation that the market would be the source of recovery was a difficult pill to swallow by contrast. On the other hand, Hayek's great lament was that he did not provide a timely response to the publication of Keynes' *General Theory* (Hayek 1983: 251), as he had with his previous work *A Treatise on Money*. This prolonged silence from Hayek could have signaled to the economics profession that Hayek did not object strongly to *The GeneralTheory*.[1] For their part, followers of Keynes believe that Keynes "won" because he was

1 Perhaps adding to these difficulties was Sraffa's claim that Hayek's *Prices and Production* had "landed

correct.[2]

In this paper we outline a heretofore unaddressed reason behind Hayek's inability to sway the economics profession. Specifically we focus on his inability to express the binding resource constraint at the core of his business cycle theory. In this article we will review Hayek's shifting views on the resource constraint limiting production, and the difficulties he had in defining it in a non-ambiguous way.

British classical economists of the 19th century put forward a theory of the business cycle that used the economy's ability to produce goods as the measure against which to sustain itself in the future. Mostly applied to agrarian economies, Jevons' "sun-spot" theory of the business cycle was the culmination of such thinking. Here the ebbs and flows of agricultural output determined how much produce would be available to sustain workers through to the next harvest (Jevons 1884: 221). Thus the ability for an economy to expand in the future was limited by the ability of the harvests in the present to provide for them. Classical economists referred to the "wages fund" as that stock of consumer goods saved up to sustain the workers during any long-dated production process.

Böhm-Bawerk's great contribution was in addressing two shortcomings of the doctrine of the wages fund: 1) that the wages fund was needed to sustain the production process for a period of fixed duration (e.g., one year), and 2) the disregard adherents of the wages fund had for the fact that the produce of one period is not exclusively consumable output, but also input for additional production processes (Böhm-Bawerk 1889). With these criticisms in mind, Böhm-Bawerk renamed the "wages fund" as the "subsistence fund" and defined is so as to include not only the sum of goods necessary to sustain workers during the production process (as the term "wages" suggests) but also those goods necessary to sustain capitalists and landowners (Böhm-Bawerk 1889: 70).

While updating the concept of the resource constraint on production to include all the goods necessary to sustain a production process was a step in the right direction, it too was faced with difficulties. The grain of truth that was evident in the wages fund – that something must be pre-saved before a production process began so that workers could devote their production towards something other than making immediately consumable output – was more-or-less transferred easily to industrial societies. With the increasingly financial economy of the 20th century, however, it was difficult to see this connection. After all, if a firm needed more funds to sustain

[itself] right in the middle of Mr Keynes' theory" (Sraffa 1932: 53). In an unprecedented move, in a footnote to Hayek's response to Sraffa, Keynes'confirmed that Sraffa was correct in this assessment (Hayek 1932: 249fn2). Hayek did not address Keynes' *General Theory* until his 1941 work *The Pure Theory of Capital*, and even then he only addressed Keynes' shortcomings unsystematically, isolating his criticisms to three areas: 1) Keynes' treatment of the interest rate as a monetary phenomenon (p. 37, 356, 364, and esp. 369-94), 2)Keynes' emphasis on gross as opposed to net saving (p. 336fn2), and 3) Keynes' emphasis of the role of changes in the money supply to the general price level with disregard to relative price shifts (p. 376-77). In some of his other works between 1936 and 1941 Hayek notes that his work is an alternative to Keynes, though he does not give an explicit or prolonged response to Keynes (see Sanz Bas 2011).

2 There exists a third group who believes that Hayek's best ideas were integrated into the New Classical School's business cycle theory (Braun and Howden forthcoming). There are serious doubts, however, as to how well modern business cycle theorists understand ABCT (see Salerno 2012).

its workers during a production process it could just borrow on the capital markets to make up for any shortfall.

When Mises formulated the core of the Austrian business cycle in 1912, he did so by using a similar foundation to Böhm-Bawerk. In his theory, however, for production to be sustainable the process "must be of such a length that exactly the whole available subsistence fund is necessary on the one hand and sufficient on the other for paying the wages of the laborers throughout the duration of the productive process" (Mises 1912: 360). Aware of the difficulties that this definition had as access to financial markets became more prevalent, Mises' final forays into business cycle theory shifted the reason why a production process could be unsustainable. Instead of failing because of a lack of pre-saved resources, production plans would become unsustainable as expectations became unhinged from realities and price inflation made economic calculation increasing difficult (or, eventually, impossible) (Mises 1949).

Hayek realized this omission in Mises' business cycle theory. He notes that Mises (1912) contains hardly any more than one sentence on the price mechanism and the business cycle (Hayek 1935: 253fn54). In Hayek's eyes there was only a poorly explained linkage between interest rates (which Mises used to proxy the size of the subsistence fund) and expectations.

Instead of relying on the subsistence fund, Hayek (1935) offers an alternative turning point for the business cycle. The length of the production process will depend on the relative expenditures between capital and consumer goods (Hayek 1935: 237). Increased expenditures on capital goods will come at the expense of consumer goods. If one were to shift expenditures higher in the structure of production by increasing expenditures on capital goods, the average length of the roundabout processes of production and, therefore, […] also the number of successive stages of production, is increased in the same proportion as the demand for intermediate [i.e., producer] goods has increased relatively to the demand for consumers' goods" (Hayek 1935: 238).

This shift to define the resource constraint on investment projects as a result of the ratio between two nominal expenditures dropped the "real" part of the constraint that the subsistence fund provided. Hayek elaborates two reasons why this nominal constraint will become binding.

In the first Hayek deals with a lengthening of the structure of production not accompanied by a reduction in consumption expenditures. As the supply of consumer goods must fall due to this shift in production even though demand for consumer goods remains constant, the price of consumer goods must rise. As a result, for some period "society as a whole will have to put up with an involuntary reduction of consumption" (Hayek 1935: 268). This argument, however, cannot explain why a general economic contraction should occur. At best, specific consumption plans will be disrupted (Braun and Howden forthcoming).

The second reason for the unsustainability of the structure of production comes from the fact that the new expenditure ratio cannot continue. For the owners of the factors of production, there can be little doubt that "in the face of rising prices of consumers' goods these increases [in income] will be spent on such goods" (Hayek [1935] 2008: 268). As relatively more income is

spent on consumer goods, the proportion of expenditures between consumer and capital goods must shift in favor of the former. The result is a return to less roundabout methods of production, with the onset of a recession as this adjustment takes place.

This argument too has its deficiencies. Hayek does not argue why the owners of the original factors of production should see their income rise in an unsustainable way when the increased expenditures on capital goods is not funded by a decline in consumption versus when a drop in consumption allows for these increased expenditures. "After all, in *both* cases the entrepreneurs have more money available for investment, and therefore, if one follows Hayek's argument, in both cases the income of the factor owners should rise" (Braun and Howden forthcoming).

Hayek's attention to nominal variables instead of real magnitudes, such as the subsistence fund, prevented him from providing a convincing argument for what limits the boom.

Realizing this ambiguity as to what real variable was at the core of the boom's turn to bust, Hayek (1936) revisited the subsistence fund. Here he defined it as a stock of capital goods, but doubted the relevance to the problem at hand. "This simplified picture of the existing stock of capital, representing a 'subsistence fund' of determined magnitude which would provide a support for a definite period and therefore enable us to undertake production processes of a corresponding average length, is undoubtedly highly artificial and of little use for the analysis of more complicated processes" (Hayek 1936: 511).

In his last full-length foray into the capital debates, Hayek (1941: *esp. chap*. 7) tried to revisit the concept though with only mixed results (Braun and Howden forthcoming). Here he reformulates the subsistence fund into a stock of goods that can be turned into capital, i.e., circulating capital. Ultimately, however, he doubted the relevance of this new formulation. On the one hand, as the goods laying claim to consumer goods is constantly shifting, as a resource constraint it was difficult to see how it could become binding. On the other hand, the amount of consumer goods at any one person's disposal depends on the choices of others. Thus the more any one individual exercises his control over consumer goods (to loosen his own resource constraint) the more binding all other individuals' resource constraint will become. After a brief discussion of how the actual subsistence fund "cannot be identified in any definite and unambiguous way" (1941: 190), Hayek scuttled the concept from his own elaboration of the business cycle.

Hayek's jettisoning of the concept of the subsistence fund as the real resource constraint had long-lasting effects on subsequent variants of Austrian business cycle theory. Modern renditions of the Austrian business cycle (Garrison 2001; Huerta de Soto 2012) do not substantiate further the claim that there is a subsistence fund at the heart of resource constraint on production processes. Even Sechrest (2006), who views the subsistence fund as essential to the core Austrian business cycle theory, does not provide a suitable link between the fund and any change that would make it become binding. He (2006: 32) defines the subsistence fund in terms of money and thus skips the main point of the subsistence fund metaphor in a manner similar to Hayek´s ([1935] 2008) focus on nominal expenditures. Modern Austrian economists, following Hayek,

are at a loss to answer the question of "what is it, in real terms, that limits the amount of investment?"

The difficulties that the early Austrian formulations of the subsistence fund had, and which Hayek was not able to suitably update to the financial economy, came in two forms. Faber (1979) felt that the subsistence fund could only be defined with any degree of fixity in a static way, and this contributed to the impasse in the 1940s as economic theory moved towards more dynamic models complete with expectations. On the other hand, in his review of the business cycle controversies of the 1930s, Bernhard (1943) lamented that the "scarcity of capital" shifted from indicating a real resource constraint at some times to a volume of money at others. This tension is especially apparent in Hayek's writings on the business cycle as he shifts between real constraints (such as his reformulations of the subsistence fund) and nominal constraints (such as his emphasis on relative nominal expenditures).

Ultimately, neither of Hayek's solutions was entirely convincing to the economics profession at large. While Keynes' reliance on "animal spirits" and deficient aggregate demand may have also have been deficient in describing the core of why boom turns to bust, they at least did seem to describe the descriptive attributes of the recession at the time.

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