# Nano-foundations of macroeconomics: an institutional overview of Keynes General Theory

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The intellectual work of John M. Keynes has been influential well beyond his time. But we have developed the habit of appreciating and discussing his main insights on the field of macroeconomics. There have been attempts to establish the "microfoundations" of macroeconomics, for instance, but their ultimate purpose is to reach macroeconomic conclusions.

The essay here proposed starts from a different perspective. Chapter 12 of Keynes' General Theory (GT) has concepts and analytical links with strong identification with the ones used by the so-called institutional approaches – old and new – mainly regarding the underlying behavioural assumptions. Our purpose here is to gather a few insights mainly from Chapter 12 and make parallels with ideas that became benchmarks of some varieties of modern institutional economics. As we work out the parallels, we try to shed light on contact points that may enrich Keynesian perspectives on the behavioural foundations of economic analysis.

Keynes' empathy with the works of John Commons was made explicit in a letter, for instance. The essay, however, will explore a broader set of theoretical connections that seems to have been anticipated by Keynes on the research core of institutional economics. Closer to what we today call the Old (or Original) Institutional Economics, Keynes in his GT considered an economic agent with bounded rationality who would deliberate from instincts, form long-term expectations from habits, and adhere to social conventions. Closer to what is the working agenda of what we today identify as a New Institutional Economics, Keynes also considered incomplete information and agency problems. Not only that, but he was also obviously concerned with the problem of institutional design.

The essay develops the claim that, in our re-writing of history with the benefits of hindsight, there is ground for a historical re-assessment of Keynes' position among the ranks of economists. He was surely one of the founding figures of macroeconomics, but also a visionary institutionalist.

## 1. Long term expectations: incomplete information and bounded rationality

Investment decisions require analysing the environment in its complexity. On this regard, Keynes repeatedly points to incomplete information. Individuals make decisions necessarily knowing only part of their environment. Expectations are formed on the basis of incomplete information. Moreover, although expectations can change as additional information is perceived, more information can never eliminate uncertainty. More information, in fact, can per se be a problem. As put by Herbert Simon (1971), information richness leads to a poverty of attention.

According to Simon (1987), bounded rationality relates to rational choice that takes into account the cognitive limitations of decision makers regarding both knowledge and information processing abilities. The idea of limits on human rationality can be found in the economic literature from at least 1880 – if we consider only a terminology that resembles its modern wording. The idea has gained a lot of momentum since Simon's works, but it was already part of the discussion among institutionalists like Veblen, Commons and Clark (Pagano 2000). It was also part of chapter 12 of GT. Simon's argument that bounded rationality leads to a satisficing behaviour (as opposed to substantive rationality that leads to optimisation) seems to be part of Keynes' view of the economic agent in the GT. One example is as follows (GT: 134): "our rational selves choos[e] between the alternatives as best we are ablé, calculating where we can, but often falling back for our motive on whim or sentiment or chance [SATISFICING]."

#### 2. Long term expectations and habits

The formation of long term expectations plays a central role in the GT. Uncertainty and bounded rationality (not only risk and information constraints) are always present on decision making. What kind of orientation do we have on such circumstances? Keynes suggests that we rely on certain habits, from which the most important one is our habit of projecting present knowledge and circumstances into the future (GT: 124):

For this reason the facts of the existing situation enter, in a sense disproportionately, into the formation of our long-term expectations; our usual practice being to take the existing situation and to project it into the future [HABITS], modified only to the extent that we have more or less definite reasons for expecting a change.

<sup>&</sup>lt;sup>1</sup> See Klaes & Sent (2005). Simon himself (1991) recognises the influence of John R. Commons on his notion of bounded rationality.

#### 3. Deliberation from instinct

Even if a habit emerges from maximising behaviour, it can hardly persist as a result of maximising procedures for its very idea is to avert continuous calculation.<sup>2</sup> As considered by institutionalists like Veblen (1914) and Hodgson (2004), individual rely not only on habits but also on instincts to make decisions. This is also something by Keynes in the GT.

Habits and customs are relevant in decision making, but there are also behavioural pre-dispositions that affect the process (and are hard to rationalise). At a given moment of crisis, for instance, fear can explain certain actions better than rationalisations. Or a certain propensity to imitate the action of a certain firm or individual prevails over a costly optimising process of information gathering. Or, still more, survival instincts lead individuals to significant bouts of courage that go beyond rational explanations.

Consider how Keynes explains business behaviour in the following passage (GT: 125):

In former times, when enterprises were mainly owned by those who undertook them or by their friends and associates, investment depended on a sufficient supply of individuals of sanguine temperament and constructive impulses [INSTINCTS] who embarked on business as a way of life, not really relying on a precise calculation of prospective profit

See also the following (idem):

If human nature felt no temptation to take a chance, no satisfaction (profit apart) in constructing a factory, a railway, a mine or a farm [VEBLEN'S IDLE CURIOSITY; INSTINCT OF WORKMANSHIP] there might not be much investment merely as a result of cold calculation.

#### 4. Rational behaviour and conventions

Keynes argues that boundedly rational individuals trust the continuity of current affairs and tend to ignore subtle signs of change – although the best profit opportunities may emerge exactly from anticipating such changes. Keynes explains our tendency to accommodate such a habitual and socially shared behaviour as follows (GT: 126):

<sup>&</sup>lt;sup>2</sup> Unless we consider the optimisation of meta-preferences, that may also create meta-habits, that require meta-meta-optimisation, and so on (see Stigler & Becker 1977 and Sen 1977).

In practice, we have tacitly agreed, as a rule, to fall back on what is, in truth, a convention. The essence of this convention [CONVENTIONS]—though it does not, of course, work out quite so simply—lies in assuming that the existing state of affairs will continue indefinitely, except in so far as we have specific reasons to expect a change

In what follows, Keynes explains that such behaviour can only originate from the interaction between individuals that hold incomplete information and can only process them in an incomplete way. The result is the confluence of partial of assessments (GT: 128): "A conventional valuation which is established as the outcome of the mass psychology of a large number of ignorant individuals [CONVENTIONS; BOUNDED RATIONALITY] is liable to..."

### 5. Agency problems

Nobel Prize winner Michael Spence, in his 2001 *Nobel Lecture* humorously told the story in which he answered "no" to a reporter who asked him if a Nobel Prize could be awarded to someone who theorises about markets in which some people have more information than others do. Spence was gladly wrong, but he was not the first one considering such a situation.

Keynes does consider the implications of the separation between ownership and control in which agency problems play a key role (GT: 125-6):

With the separation between ownership and management which prevails today and with the development of organised investment markets, a new factor of great importance has entered in, which sometimes facilitates investment but sometimes adds greatly to the instability of the system [SEPARATION BETWEEN OWNERSHIP AND CONTROL]. ... Thus certain classes of investment are governed by the average expectation of those who deal on the Stock Exchange as revealed in the price of shares, rather than by the genuine expectations of the professional entrepreneur [AGENCY PROBLEMS].

Separation between the professional entrepreneur (principal) and professional investors (agents) have consequences over the regulation of certain assets. The entrepreneur delegates investment decision making to agents, who may not take to heart his interests, aims and concerns.

#### 6. Institutional design

Keynes relates the behaviour of some individuals – professional investors – to the existence and nature of an institution – the financial market (GT: 128): "Moreover,

this behaviour is not the outcome of a wrong-headed propensity. It is an inevitable result of an investment market organised along the lines described [INSTITUTIONS; INCENTIVES; PREFERENCES FORMATION; RULES OF THE GAME]." In other words, the behaviour of professional investors is moulded by the institution in which they work. Even the problem of self-selection (individuals with "distorted propensities" prefer to work as professional investors) can be affected by the nature of the institution. If financial markets have strict norms and punish deviant behaviour or pays "good propensities," then the design works better towards matching the interests of entrepreneurs and professional investors.

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