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Keynes vs. Mainstream Economics on Macroeconomic Sustainability

Summary

This paper presents the fundamental difference in macroeconomic methodology employed by Keynes in his opus magnum 'The General Theory of Employment, Interest and Money', Keynes, 1936 as very different to 'Mainstream Economists' *General Equilibrium Market Model*, Nordhaus, 2018.

*'With the words 'We simply do not know,' **Keynes** describes in his 'General Theory' what he calls 'objective uncertainty.' There is simply no way in which one can foresee certain events or developments because they are objectively unknown. **The past does not predict the future.***

*This constitutes a fundamental break with the dominant neoclassical world view. **The neoclassical doctrine** assumed then and even today that there are observable regularities in the development of the economy, which, once they are detected, just have to run their [market] course: policy is to be limited to minor interventions and corrections, Flashbeck, (2016)*

Keyword: Keynes vs. general equilibrium economics, macroeconomic methodology, uncertainty, productivity, sustainable development, future generations.

Introduction

This paper analyses the fundamental differences of macroeconomic theory and method employed by Keynes in 'The General Theory of Employment, Interest and Money', Keynes, 1936 (with a view on 'The Economic possibilities for our Grandchildren', Keynes, 1931) in strong opposition to (modern) mainstream

economics and its use of General Equilibrium Market Model, (even when the impact of climate change is introduced, Nordhaus, 2018).

In any case one could reasonably well ask the question, what has Keynes to say about 'climate change'? Nothing explicitly, of course, he died in 1946; but implicitly by discussing what could be a relevant economic methodology when looking into the uncertain/unknowable future.

A hint might be detected, when we listen to the toast he offered the economic profession, when he retired as editor the *Economic Journal* just after the war: 'that economists are the trustees, not of civilization, but of the **possibility of civilization**' [Harrod, 1951]. Keynes used deliberately the word 'possibility', because his research during the 1930es leading up to the writing of his opus magnus *The General Theory* had convinced him that "About the future we cannot know'. We can only sketch possible scenarios, which are partly in the hands of and depending on the politicians' knowledge of macroeconomics and partly on their ideological inclination.

Anyhow, Keynes, the realist, argued that the longer we seek to look into the future the less we can know, because genuine uncertainty (e. i. lack of knowledge) will be more and more dominate. This has to be so because the long(er) run macroeconomic development is dependent on 1. (unstable) economic structures, 2. (unknowable) external events and 3. (yet undecided) economic policy. Hence, the economic future is unknowable, and furthermore (partly) in the hands of politicians for good and bad. This is so, because the Real-World market economy cannot by itself - due these impediments - converge towards any pre-known state of General Market Equilibrium.

So, what to do for the economic advisors, when politicians ask for an advice?

This is a delicate matter for the economic profession to put it mildly.

Allow me to convey some personal recollections from the Danish economic society with regard to the use of macroeconomic models to support the

government's policy proposal to establish a full employment, balance of payments equilibrium and (today) sustainable development.

We are all the way back in the year 1970, I was employed as student in Danmarks Statistik, office of economic analysis and econometric model building under the supervision of Professor Ellen Andersen¹. She had at that time initiated a brand new research project of estimating (statistically) a few macroeconomic behavioural equations of the Danish economy (1953-69). Hence, a small demand-driven macromodel (named ADAM) was set up using the national income identity as the supply (GDP) function.

Step one at that time was to 'ask' the computer to find a solution to this tiny set of equations – remember we are back in the year 1971! It took several months to learn to make the computer solving several mathematical equations simultaneously.

Step two, could the model reproduce history? That went reasonably well as long as the historical data, which had been used for the estimation of the behavioural equations, were calculated, so called 'ex-post projection'. Then came the real test of the model: could it predict the unknown future – just one or two years ahead? Here we were rather successful (and lucky), when we in the Autumn of 1973 made a kind of test-projection for the coming year. Due to the international oil price hike and falling real wage in the OECD-area the model projected a dramatic downturn of GDP in 1974 with derived multiplier effects due to falling demand. Accordingly, we recommended a fiscal stimulus package for 1974. Of course, no one listened to the outcome of our econometric model, which was considered by the established economists as close to 'black magic'. When GDP dropped and unemployment started to rise steeply in the Autumn of 1974 and further on into 1975 the negative attitude towards economic models was reconsidered somewhat.

With this (personal) success, we tried to look some 3-5 years into the future; but we did not dare to publish the outcome, partly because inflation (an exogenous

¹ I have to be far to mention, that in the early 1970s we were a group of newly educated macroeconomists: Jørgen Røsted, Christen Sørensen, Anders Møller Christensen and me guided by Ellen Andersen – at that time called the 'young Turks' - who did the pioneering econometric (hard) work.

variable) had become so dominant in the 1970s (more than 10 per cent each year) and partly because the projection seemed to go astray. In some way this gave a flash back to the 1930s! And hereby a direct reminder of how important macroeconomic policy could be to stabilize the economy in turbulent periods.

Anyhow, the above model-experiments were undertaken in the middle of the 1970es which became the final years, where Keynesian Theory and trust in the need of continuously supportive policies were mainstream economics. But the seemingly failure of Keynesian economic policies to handle inflation (and unemployment) in conjunction with the election of Margareth Thatcher in UK (1979) and Ronald Reagan (1981) in the US time was ripe for a dramatic shift in economic political arguments towards neoliberalism: 'Set the market economy free, let the market forces work – to the benefit of all of us!'

Hence, there was a strong political call for a radical new economic market-founded policy. This call gave way for quite a number of Keynes-critical macroeconomists, who had continued in some university niches to do research within the old framework of neoclassical economics but renamed as monetarists - among other places in Chicago. In fact, Milton Friedman got a quick come-back by receiving the Nobel Prize in 1976 for his contribution to monetary macroeconomics. One of his younger colleagues, Robert Lucas, became a dominant figure during the 1980s. He became the father of New Classical Economics characterized by an assumption of persistent market equilibrium within the real part of a monetary economy, Lucas, 1987.

However, during the 1990's macro-data showed persistently high unemployment in the Western Economies which became a (political) problem for the politicians and a (theoretical) problem to the (hard core) new classical economists. Accordingly, a number of 'softer' new classical economists established themselves by showing that the equilibrating market forces were not in reality as strong as assumed by Lucas & Co. They argued therefore that a number of real word impediments would cause delays in the adjustment process to general market equilibrium (GME). Their theoretic focus points were. 1. slow real wage adjustment, 2. asymmetrical market information, 3. foreign exchange rate volatility etc. Due to these obstacles in the market-driven adjustment process towards GME – there could be established theoretical

arguments in favour of political initiatives to speed up the adjustment to the known(!) state of general equilibrium. This school of 'soft' new classical economists call themselves 'New Keynesian² Economists', Mankiw et al. 1992.

Within this dominant school of 'mainstream' macroeconomics a unique methodological approach to *macroeconomics* is employed. They argue that coherent macroeconomic theory requires a proper microeconomic foundation, which – surprise, surprise – should be based on the theory of the 'rational economic man'. These so-called 'economic agents' are assumed to be individually optimizing and to have perfect foresight (no uncertainty). Hence to this 'rational economic man' the future is knowable to such a degree of certainty that each of them can rely on an optimization of their individual utility in accordance with the known(!) structures of the perfect market economy. Hence, there are no economically rational arguments in favour of continuous political intervention. The only argument could be intervention to overcome short term consequences of sticky prices & wages and to set-up missing market dealing with externalities like CO₂-emission, pollution of sea- and ground, fish catches etc.

On this background of two such fundamentally diverging methodologies it should not come as a surprise, that Keynes-inspired and so-called 'mainstream' economics set up fundamentally different analyses of how to achieve 'sustainable development' which will be presented below. Hence, there will of course be very different conclusions on 'what to do' to secure a 'sustainable development' to the benefit of not the least our grandchildren!

Macroeconomists disagree, also on sustainability.

Let me start with the mainstream approach represented among other by Nordhaus, 2018. He considered CO₂-emission and water-pollution as external effects to the (perfect) market system, because there are no markets! The way forward within the GE-model set-up would be to monetize and hence internalize the economic cost of pollution either by setting-up a market for pollution-

² Which is very offensive to Keynes, and demonstrates how little these, self-proclaimed, 'new-Keynesian economists' have read (or understood) of Keynes!

permits or more straight forward to impose an emission tax. But, in both cases a governmental hand is needed to decide on the 'optimal' policy, because the environmental costs are not and cannot be determined by a perfect market system, where decisions are made only by individually optimizing living persons. Hence, even in neoclassical economics the role of a governmental hand is unavoidable, when market external effects are considered.

The economic possibilities for our grandchildren – anno 2026

It's hard to predict! Not least the financial advisers had to face that reality in 2008. Economics is not an exact science. On the contrary. The economy of society is man-made and therefore changeable. Try for instance to rewind 30 years back, when the IT revolution, that now forms an essential part of our everyday lives, was pure futurism. Not to mention the AI-revolution, which is unfolding these days. Hence, it does not make sense to present exact predictions – at best different scenarios can be constructed. It simply does not make sense to predict the economic future, the same way as solar eclipses, comet orbits and gravity – they are not human being.

Back in the late 2010s, the happy message from the EU-commission, from national Ministries of Finance and even economic sages was, that now the European economy was back on the stable growth track, where production and employment would grow by itself (due to the stabilized market-mechanism). It was predicted that in just 5-6 years, 'we' (i.e. the EU GDP) would be €1.000 billion larger. But the economic future *is uncertain*. Once again, just like in 2008/09, the rug was pulled under the economic fortune tellers by the Covid 19 pandemic. Fortunately, the EU-commission suspended immediately the Fiscal Pact and had to accept significant public

sector deficits. Fortunately, these politically decided Budget Laws are 'man-made', in contrast to the law of gravity, and therefore stands to be changed, if there is political will to do so.

In any case does the requirement of a public sector balanced budget make sense at all in an *uncertain* macroeconomic environment, where demand and supply are disconnected and the private sector in persistent imbalance?

Sudden upheavals and blatant economic misjudgments by private and public actors could justify such skepticism. In addition, it would not harm if the high-profiled economic 'fortune tellers' (OECD, EU-commission or the Danish Ministry of Finance) showed a little more humility when advising the politicians on the economic challenges of the future to come.

But economists often have an implicit political vision of how they wish the future to develop and accordingly how to promote that vision through seemingly neutral policy advices of a balanced public budget or the use of cost-benefit analysis to judge on future investments often with a killing high rate of discount.

Keynes, to the contrary, sought to avoid these methodological traps of pretending that the future is knowable. Instead, he did during the 1930 start to look - literally out of the window - at reality, and when that was not suffice, he looked, of course, into the statistical yearbooks. Therefore, it may come as a surprise that in the year 1930(!) Keynes published an essay entitled *The Economic Possibilities for Our Grandchildren*. It was the year just after the stock market crash on Wall Street that had led to a dramatic fall in real GDP and hence a steeply rising unemployment in all Western countries. Anyhow, The title was relevant because it mentioned the word 'Possibilities'. To Keynes economic development is not deterministic! The economic future is open dependent on circumstances and macroeconomic policy. It did not have

to be Keynes' liberal vision - hence the title of the essay could have been 'The Economic *Opportunities* for Our Grandchildren'. His concluding chapter in *The General Theory* from 1936 is almost clairvoyant by its description of the economic possibilities which were materialized in the decades just after the war.

Once again, it is important to note that Keynes used the word 'possibilities'. It is not a forecast, but a vision, which requires a well-functioning and well-regulated economy, supported by a targeted economic policy. Note further, that although Keynes was a prominent member of the Liberal Party and adviser to the party's candidate for prime minister, David Lloyd George, in 1929, he was deeply skeptical of the liberal laissez-faire and highly market-oriented economic policies. On the contrary, an active investment policy should be pursued to ensure full employment, just as economic inequality should be reduced; for the market economy system was in Keynes's optics both unstable and unfair, chapter 23 in 'The General Theory'.

What economic opportunities did Keynes see open up in the future, if the government listened to his advice? Using simple mathematics, he calculated that a fairly continued growth in real GDP of 2 per cent/year would mean that production in the year 2000 could be four times greater per capita in Britain, compared to the interwar period.

Here Keynes became dizzy: a quadrupling of real production and of the standard of living would lead to a material abundance, which he had a hard time imagining the usefulness of. It should be remembered that already in the interwar period, the majority of the British population was, after all, secured food on the table, clothes on the body and roof over their heads. So, the quadrupling of the material living standard for 'our grandchildren' (i.e. us!) could hardly make sense. If only inequality and poverty-causing

unemployment could be reduced, then his vision was to increase welfare by reducing the number of working hours.

Keynes therefore in his essay asked the reader this question (in my wording): Now that the basic material needs could be met in the nearer future, why should we continue to produce more and more of goods that we increasingly do not need? To Keynes, it did not make sense to go on producing goods (and services) which we do not really need just to keep people employed! He himself gave the answer: Production and monetary income should never become an end by itself, neither for the citizens nor for the government. And since working in agriculture and industry was a hard job, why not let the machines take over? But to avoid unemployment the reduced working load has to be shared equally by all employees. So, why not reduce working hours instead of continuing to increase production just to keep unemployment low? Keynes concluded.

Hence, Keynes's vision of exchanging increased productivity with reduced working hours would mean increased welfare, without a reduction in material living standard. The yoke of work had to be lighter by fewer weekly working hours and longer holidays. We are talking in the 1930s about a working week of 48 hours and no agreed holidays. Without hesitation, Keynes imagined that at the turn of the century (our century), weekly working hours could be reduced to 20 hours - 4 hours a day from Monday to Friday and hereby allow all workers to realize the true values of life, which Keynes summed up under the headings of: *Love, Beauty and Truth*.

This vision sounded almost too good to be true.

And as you know, such a reduction in weekly working hours has not (yet) materialized. But Keynes's calculation - that production could quadruple in two generations - proved to be true. So, increased material living standard, it seems, was preferred to a reduced number of working hours. In some

countries there has been a modest reduction in weekly working hours and an increased number of weeks for holidays; but at a prize of married women in large numbers did enter the labor market. Hereby, the total number of working hours has therefore not decreased significantly in any country!

The environmental possibilities for our grandchildren - anno 2060!

Now let us take wings and look 30-40 years ahead into the future: what are the economic possibilities? The OECD (Western Economic Cooperation Organization) makes such an exercise on a regular basis. For instance, in June 2023 OECD presented a so-called basic scenario for the development of production (GDP) in a number of individual member-countries and for the world as a whole for the coming 40 years, cf. OECD, 2023.

This OECD's projection of production opportunities for the Danish economy – just to give an example - for the coming 40 years made me dizzy, once again. The OECD projected an increase in GDP of no less than 120 per centage – meaning more than a doubling of GDP. I subsequently had to ask myself this question: How should households manage to digest such a huge increase in private consumption – what does an average family in Denmark need of extra material goods and services to such an extent in their daily life: one more car? an extra 100 m² housing or....? It simply does not make sense.

The OECD must have disregarded in their projection the possibility that material saturation may occur long before 2060. If the OECD is correct that productivity will continue to increase on average by 1½-2 per cent/year, and I am correct that private consumption are heading towards saturation – then a

door to new political initiatives will open. I will return to these possibilities below; but in between I have to challenge the OECD-projection.

Because to be realistic, it is in my opinion a serious omission to make a long term GDP-projection without taking the negative consequences of the unavoidably deteriorating conditions for climate, nature and the environment into the calculation. If the OECD's calculation of a doubling of GDP in the Western countries did materialize, it would cause a significant and unpaid rise of temperature and other environmental 'debts', which is passed on to our children and grandchildren. I do not think that our grandchildren - if we could ask them - would thank us for this 'baptismal gift'. It is exactly this kind of generational selfishness, which the younger generations are increasingly opposing – among other represented by Greta Thunberg.

In perspective of this increasing environmental debt to coming generations what advice would Keynes have given today to the national governments regarding and securing his grandchildren's future? He would (probably) have accepted the view that technology could continue to improve productivity significantly; but he would have protested that this enlarged capacity of production should be used for a similar growth in real GDP. He would – as he already did in his 1930-paper - argue for a reduced weekly working load for instance with half an hour every second year for the coming 60 years (two generations)! As a consequence of the reduced number of working hours wage earners would, of course, see a smaller rise in their weekly pay – which of course could be even be given a social profile. In any case shorter working time would leave more leisure time, where the real values of life: 'Love, Beauty and Truth', (Keynes, 1931) could be realized.

Keynes, as we know, was not concerned about the environment. But even if the reduced number of working hours were realized, *there is still a potential rise in GDP **each year** by nearly one percentage left for other purposes.*

Governments could decide to use a part of this ever growing GDP-potential for environment investments. In fact, there will be ample room for the needed increase of green investments to transform the Western Economies to be environmentally sustainable. In this case CO₂-emission would start to fall year by year, which would make the climate debt grow more slowly (i.e. the rise in temperature also starts to slow down). In this vision, CO₂-emission could be zero by the year 2060 and the extra green investments would then no longer be needed; and the rise in temperature will - in this pretty optimistic scenario - stay below 2 °C.³

Let me conclude: Keynes was a visionary economist. The main message of *The economic possibilities for our Grandchildren* was that the course of the macroeconomic system (Titanic) is open to being changed. The future course depends mainly on politics and external circumstances.

So, there are good reasons to recall what Keynes told the chief architect in 1942, when they were overlooking the overwhelming war damages of London. The architect wrung his hands and asked in a resigned mood: What to do? Keynes replied: '*What we can do, we can afford!*'. Moggridge, 2010. Imagine what Keynes would have said today about the needed environmental investments, which are estimated only to amount to 2 percentage of GDP – equivalent to the GDP-growth of one single year! (Ministry of Finance, 2020.) Allow me to finalize this paper by referring to Keynes's words: 'About the future we cannot know', and to add on my own account: only to make knowable precautions and to protect the environment!

Literature

³ It should be recalled that William Nordhaus' in his Nobel-lecture, 2018 concluded that the optimal rise in temperature would be 3½ °C!

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