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A Critique of the Phillips Curve – The Austrian Tradeoff

1. Introduction

Few ideas have been more influential in the economic policy of the last few decades than the tradeoff expressed in the Phillips Curve (Phillips, 1958).[1] All over the world, central bankers base models and central plans on the idea that a "national economy" can trade inflation for unemployment, and vice versa. This is the belief behind the frequent increases in the money supply executed by governments. The dominant idea both in academia and among policy makers is that growth in liquidity should only be limited to the extent that it can cause untoward increases in the inflation rate,[2] while they should be used for reducing unemployment. In this paper we demonstrate that the tradeoff is more complex than it is generally believed to be, and that the cost of monetary policy is much higher than what policymakers advocate.

The flaws of the theory behind the Phillips Curve and the many models that evolved from it abound. The underlying assumption of the existence of a "national economy" as a real being and not merely an abstract, heterogeneous and indefinable mental construct is problematic enough. There are also many issues with the assumptions behind employment-oriented monetary policy, such as the neutrality of money, the homogeneity of capital, and jobs as ends instead of means. Misconceptions about the true effects of deflation, and the pretense of knowledge in assuming macroeconomic

[1]Wrote Oliver (1999): "For more than 20 years, the Federal Reserve has seen its No. 1 job as balancing growth and inflation, a duty enshrined in the 1978 Full Employment and Balanced Budget Act. The theory behind this mission is that too much growth brings inflation, but slashing inflation too much would jack up unemployment. So the Fed's job was to bring the Goldilocks economy: not too hot, not too cold, just right." See also on this Salerno (2003), Ravier (2013), Casey (2014) and Tooley (2010).

[2]The equilibrium between inflation and unemployment is assumed to be a natural consequence of democracy. Since both phenomena cause dissatisfaction among voters, politicians would have an incentive to not let any of them reach a level that is considered too high by the median voter.

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calculation as a humanly feasible task reduce the possibility of rational decision making on the supposed tradeoff.

In section 2 we deal with the national economy. The burden of section 3 is to discuss the Phillips curve and economic calculation. In section 4 we attempt to come to grips with the redistributive aspects of inflation. The subject of section 5 is the Hayekian triangle. Section 6 deals with the Austrian Business Cycle Theory, and section 7 with our attempt to (partially) defend the Philips Curve. We conclude in section 8.

2. The National Economy

First of all, the idea of a "national economy" is problematic. Only individuals can act, and therefore the *Volkswirtschaft* is merely a mental construction, a figure of speech if you will. What matters in a plan is not the net effects on this mental construction, but those on each individual. A policy that will employ one man might bankrupt another. The monetary expansion that will bring prosperity to the bond dealer may impoverish a wage earner. Discussing net effects while ignoring the prices paid by individuals is the very negation of good economics. It undermines the confidence of investors, entrepreneurs and consumers. No serious argument can be made for a plan that aims for prosperity but trumps private property and individual rights, the very bases of economic development. As Mises (1949, pp. 320-22) puts it:

> The Volkswirtschaft is a sovereign nation's total complex of economic activities directed and controlled by the government (...) [People often assume] that there is an irreconcilable conflict between the interests of the Volkswirtschaft and those of the selfish individuals eager to seek profit. They do not hesitate to assign priority to the interests of the Volkswirtschaft over those of the individuals (...) The truth is that individuals in their acting, in their capacity as producers and consumers, as sellers and buyers, do not make any distinction as between the domestic market and the foreign market. They make a distinction as between local trade and trading with more distant places as far as the costs of transportation play a role. If government interference, such as tariffs, render international transactions more expensive, they take this fact into account in the same way in which they pay regard to shipping costs.

Much more could be said about the incoherent proposition that a "national economy"-oriented central plan could be helpful for a market-based production system. Nevertheless, we will not focus on this issue in this paper, and we will demonstrate other problems with the Phillips Curve that become evident even if we, for the sake of argument, accept the idea of an existing "national economy".

3. The Phillips Curve and Economic Calculation

When the government sets out to reduce unemployment, a very common course of action is to induce a credit expansion in the hopes of promoting spending, investment and, as a consequence, jobs.[3] How-

[3] Other common policies include increasing government spending, subsidizing labor-intensive industries, and creating tariffs (see on this Block, 1976, Chap. 23; Block, 2013, Chap. 2; Block, Horton and Walker, 1998; Boudreaux, 2017; Brandly, 2002; Brown, 1987; Friedman and Friedman, 1997; Hazlitt, 1946, Chap. 11; Johnsson, 2004; Landsburg, 2008; Mullen, 2015; Murphy, 2004; Ricardo, 1821; Roberts, 2016; Rothbard, 2005; Smith, 1776). All of these are failures on their own

ever, that is not the only easily observable effect of a credit expansion. As this new credit is not the result of increased savings, but instead a rise in the quantity of fiat money in circulation, the value of money will change.[4] The increase in supply causes a drop in the market value of money and a general rise in the prices of goods and services in the market. This reflects a boost in both consumption and investment, as real wages are lowered. Therefore, central bankers are assumed in effect to be able to create short-term employment, at the cost of inflation, by simply inducing the creation of fiat credit. The relationship between these two variables—inflation and unemployment—is represented in the Phillips Curve. Governments then proceed to pick certain points on this curve where they feel that inflation and unemployment are properly balanced.

One problem with the unemployment versus inflation tradeoff is that the latter cannot be adequately measured. So even if this were the only cost involved, no rational calculation would be possible. Any attempt to calculate the inflation resulting from monetary policy must be based on the variation of prices of a certain basket of goods, or specific sets of goods of those of a higher order.[5] For this method to be valid, two very unrealistic assumptions must be made: First, money must be considered neutral, otherwise variations of certain prices would not convey any information about the prices of other goods. Second, it must be assumed that in the absence of such policies there would be no deflation, or alternatively, it can be assumed that deflation is somehow harmful, and thus its prevention is not really a cost.[6]

Neutrality is not a reasonable assumption because the increase in the quantity of money affects each individual and firm in a unique way. For instance, banks, which receive the new money first, are able to purchase goods at the pre-inflation levels, and thus benefit from a real increase in wealth. Wage earners, who only have their remuneration increased after a long delay, will have to buy goods at inflated prices while earning pre-inflation income, thus becoming poorer. Those on fixed incomes—the proverbial “widows and orphans—are in even worse shape since their revenues never rise, but the prices they face most certainly do. Since

merits, and we do not propose their use as alternatives to monetary policy.

[4]The increase in the quantity of money does not necessarily involve its printing. Credit expansions through fractional reserve banking play an important role in monetary expansions. For a critique of fractional reserve banking see Bagus (2003), Bagus, Howden and Block (2013), Barnett and Block (2005, 2008, 2009), Baxendale (2010), Block (2008), Block and Caplan (2008), Block and Garschina (1996), Block and Humphries (2008), Block and Posner (2008), Davidson (2008), Davidson and Block (2011), Hanke (2008), Hazlitt (1979), Hollenbeck (2013, 2014), Hoppe (1994), Hoppe, Hülsmann and Block (1998), Howden (2013), Huerta de Soto (1995, 1998, 2006, 2010), Hülsmann (1996, 2000, 2002, 2003, 2008), Murphy (2010), North (2009), Polleit (2010), Reisman (1996, 2009), Rothbard (1975, 1990, 1991, 1993) and Salerno (2010a, 2010b, 2011).

[5]Garrison (2001) quite properly characterizes this as an “earlier” not a “higher” order.

[6]On the actual economic *benefits* of deflation, see Bagus (2003, 2006, 2008a, 2008b), Barnett and Block (2006, 2008), Hulsmann (2008), Kaza (2006), Reisman (1996, 2000, 2003, 2007), Rockwell (2003), Rothbard (1976, 1991), Salerno (2003, 2004) and Selgin (1997).

these effects are part of the production costs and impact both demand and supply of goods and services, they will lead to changes in relative prices and a different net price change for each good.[7] Therefore, any attempt to estimate a single inflation rate for the whole economy, and the very notion of general price level, are futile (Mises, 1949 [1988]).

As for the second problematic assumption, contrary to widespread belief, deflation is not only harmless, but it is also a natural and beneficial outcome of capitalism. It is harmless because it does not reduce investment, since entrepreneurs are not concerned with the nominal profits that are reduced by the falling prices. Entrepreneurs and acting men in general are properly concerned with real gains (Higgs, 2008). Deflation is a natural outcome of capitalism, because there is a constant gain of productivity created by the accumulation of capital, which occurs in the form of technology, human capital, and physical capital. This means fewer resources are used in the production process, which creates the same amount of goods and services, or even more or them, and therefore they become cheaper. That is why free markets lead to an increase in wealth for all consumers, even those who did not increase their own productivity. While measuring the inflation created by their programs, central planners seem to completely ignore the fact that not only prices are rising, but also they should be falling and consumers should be getting wealthier because of this. Past experience show no incompatibility between deflation and growth, as Higgs (2008) explains:

> To elaborate just a bit, the rate of economic growth from 1866 to 1897, a period of secular deflation, was perhaps the greatest ever experienced by the US economy during a period of comparable length. Real GDP grew by more than 4 per cent per year, on average, notwithstanding the persistent deflation. So, even if you've not mastered the works of Ludwig von Mises and Murray Rothbard, even if you are a confirmed positivist in your methodological bent (as I was in 1971), you can see clearly that the rate of economic growth and the rate of price-level change have been independent, at least within the ranges of these variables in US economic history.

This should be enough to end the argument about the Phillips curve. No person or organization can claim to be able to make rational decisions without having any real knowledge about the costs of the different alternatives. Besides, due to the redistributive effects of inflation, the question of the legitimacy of those acts also becomes pertinent, although ethics is not a subject addressed in the present paper. However, there is more to the Phillips Curve than the problems already mentioned, and its impact on the economy is much more complex than what has been discussed so far.

4. Redistributive Aspects of Inflation

We can, for instance, analyze the redistribution issue from the perspective of policymakers' goals. Creating employment is an agenda generally proposed with the declared intention of helping poor wage earners who depend on jobs to earn a living. In this case then, the redistributive effects of inflation are very relevant for the goals of the program. Jobs are means, not ends in themselves; people work to acquire wealth and thus increase their

[7] A theory of monetary policy that assumes neutral money is as realistic and practical as a theory of airplane building that assumes no gravity.

purchasing power.[8] A program that is designed to help them by creating jobs in the short run, but that at the same time reduces their income through inflation is contradicting itself, and it has an unknown net effect on the people it is supposed to help.[9] In the words of Sowell (2012):

> It is grotesque when the government puts a bigger bite on the poorest. This can happen because the rich can more easily convert their assets from money into things like real estate, gold or other assets whose value rises with inflation. But a welfare mother is unlikely to be able to buy real estate or gold (...) No wonder the Federal Reserve uses fancy words like "quantitative easing," instead of saying in plain English that they are essentially just printing more money.

The Phillips Curve is a short term mechanism, and its employment effects, which result from an intervention in the price system, cannot last; for in time, acting men will adjust to the new supply of money, and markets will start to head towards equilibrium and away from the artificial employment levels. Nevertheless, it also raises the question: Why not constantly repeat the short-term policy and thus "build" a long-term effect? Most economists will look to inflation for an answer, but the problems with that approach have already been introduced.

5. Hayekian Triangles

Hayekian triangles are an alternative to the Phillips Curve. This model represents the effects of monetary policy on the allocation of capital and consumer goods. It attempts to represent the concepts contained in the Austrian Business Cycle Theory. Some of the detrimental effects of increased money supply can be seen in the triangle, as it depicts how the production time is increased. Also, Hayekian Triangles do not depend on the unrealistic assumption of neutral increases in the quantity of money (Bellante and Garrison, 1988).

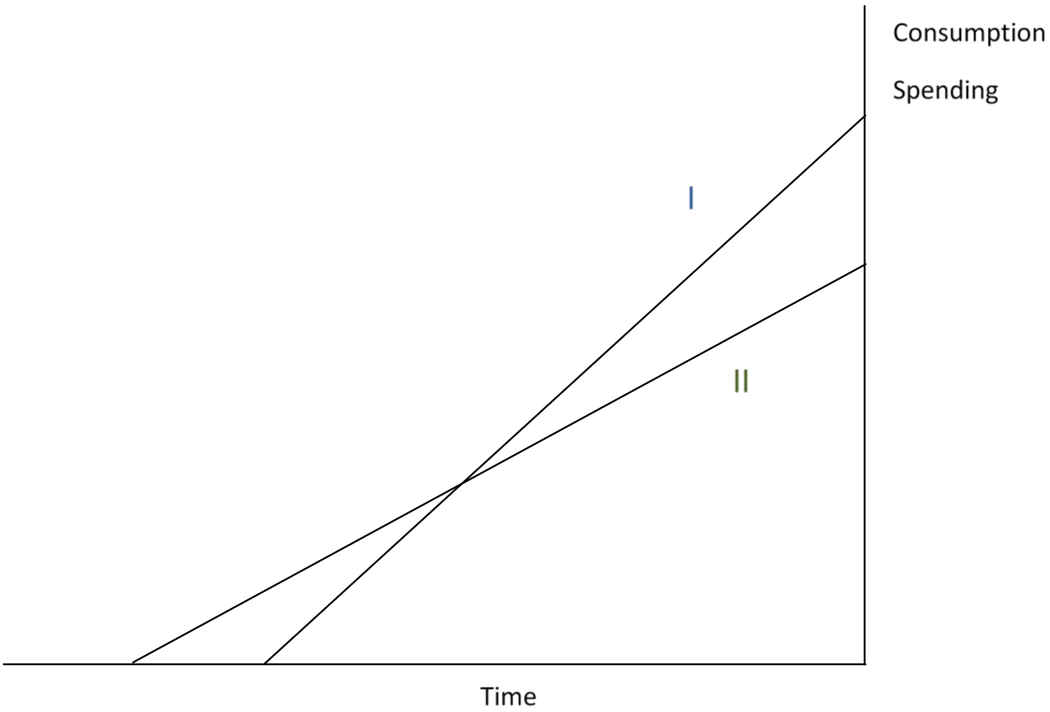
Despite these advantages, Hayekian triangles are still a very flawed representation of the complex process that monetary policy creates. Some of its flaws, such as the use of macroeconomic aggregates, were already discussed, as they are also present in the Phillips Curve. Other problems, such as confusions on the concept of "stages of production" will not be covered in this paper. Barnett and Block (2006) have thoroughly enumerated many criticisms of the triangles, and there is no need to further elaborate on them.[10]

[8] If that was not the case, then all the government would need to do is to employ all the people it wanted to help at a $0.00 wage, and they would be better off. That is of course an absurd idea, which shows that the issue is the income of the workers, not their employment status.

[9] It is not role of economics to pass on judgment on the ends aimed by acting individuals. Therefore it is a task for other disciplines, and ultimately for the economic actors, to decide if programs to help the poor should exist, and if their costs are reasonable. It is the role of economics, however, to analyse such programs and discover if they can attain their goals. This is precisely what the present paper attempts to do.

[10] The authors of Barnett and Block (2006) disagree with one another about whether Hayekian triangles should be completely discarded or not. Either way, it is enough to point out that the triangles are a flawed way to illustrate the implications of the Austrian Business Cycle Theory for monetary policy.

Figure 1



Why even mention the Hayekian triangles in a paper which is devoted to analyzing the Phillips Curve? What is the relationship between the two, such that we herein employ them in tandem with one another? It is this. The analyst of the latter typically argues that additional employment, and therefore wealth and economic well-being, can be attained via inflation; it will reduce unemployment; there is a negative relationship between the two; more inflation reduces unemployment; hence the negative slope of the curve. Austrian Business Cycle Theory (ABCT), which is usually modeled in terms of the Hayekian triangle, takes the very opposite position. The two are 180 degrees opposed to one another. Figure 1 shows this model before and after inflation is introduced. When that takes place, the hypotenuse of the triangle moves from I to II. This is due to a fall in interest rates (the angles of the leftward part of the triangle) as a result of the increase in the stock of money. But this is unsustainable, given that time preferences (the determination of interest rates in Austrian economics) have not changed. Market forces will tend to bring us back to hypotenuse I.[11] All of these changes, due to inflation, are not costless. The very opposite is the case. Thus, this seeking after a reduction in unemployment, via inflation, reduces economic wealth and human well-being. This, then, constitutes yet another flaw in the analysis usually associated with the Philips Curve, one not

[11]This is only a rough approximation. Money is not neutral. There will be all sorts of other changes in relative prices. In would therefore be more accurate to say that market forces will bring us back *in the direction* of the initial triangle.

typically appreciated. In the event, if those in charge of public policy really wanted to reduce unemployment, they would instead eliminate the minimum wage law, and, labor unions that boost wages above productivity levels.[12]

6. The Austrian Business Cycle Theory

Although the desired effects of monetary policy are only seen in the short term, the same is not true of its costs. In fact, interventions in the price system have medium and long run effects, as described in the Austrian Business Cycle Theory.[13] Interest rates are an expression of two basic attributes of human action: time preference and uncertainty. Time is valuable because we prefer the present to the future, and we do not know what will happen tomorrow. These principles, and the inescapable fact of scarcity give birth to the question: What is worth doing now, and what plans should be postponed? Through the prices of time and money expressed in credit markets, i.e., the interest rates, acting men can apply economic calculation in order to make such decisions.

When interest rates are distorted economic calculation will be inaccurate, and resources will be misallocated. First, during the boom phase, the illusion of prosperity will lead individuals into making mistakes. Malinvestment, and consumption that is not sustainable at the current productivity level will lead to losses of capital. Then, when the price structure becomes clear and reality is revealed, the losses have already occurred and the production structure must be adjusted to fit the newly discovered reality. During the adjustment unemployment will rise, as entrepreneurs and investors try to discover the adequate applications for the factors of production. If the market is allowed to operate, and free trade takes place, the high unemployment will be temporary, but losses incurred during the boom (and noticed in the bust) are sunk costs.

Since it takes time reorganize production, the bust not only involves accounting for the losses incurred in the bubble, but also leads to lower economic growth than otherwise would have been the case (Hülsmann, 2003). With less capital, and higher unemployment, fewer goods are produced and therefore consumers have less to buy. So the real tradeoff for the policymakers is between short-term unemployment and a set of conditions that include the traditional short-term inflation, plus an increase in future unemployment and a reduction in economic growth, which means a smaller increase (or a decrease) in accumulated capital and in the amount of goods available to consumers.[14]

[12] See, on this claim, Batemarco *et al*. (2014), Becker (1995), Block (2001), Burkhauser Couch and Wittenburg (1996), Cappelli and Block (2012), Deere, Murphy and Welch (1995), Friedman (undated), Gallaway and Adie (1995), Galles (2014), Gitis (2014), Hanke (2014a, 2014b), Hazlitt (1946), Hovenga (2013), Howland (2013), Klein and Dompe (2007), Lingenfelter *et al*. (2017), McCormick and Block (2000), Neumark (2015), Neumark and Wascher (1992, 1995), North (2014), Powell (2013), Reisman (2014), Rothbard (1988), Rustici (1985), Sowell (1995) and Williams (1982).

[13] Barnett and Block (2005, 2006), Block (2001), Block and Garschina (1996), Carilli and Dempster (2001), Garrison (1994, 2001, 2004), Garrison and Bellante (1988), Hayek (1931), Mises (1998) and Rothbard (1993).

[14] Israel (2017) more extensively covered the long-term costs of employment-driven monetary policy.

This underestimation of costs tends to lead to a lack of appreciation of the flaws in inflation, *a la* Philips Curve.[15] And as we cannot really predict these costs quantitatively, the only way to analyze them is qualitatively. That is, the only information available for decision-making is what is gained and what is lost, but not how much is gained and how much is lost. Since there will be losses in all the variables considered, including future employment, these policies would only make sense if the goal was to trade a reduction in unemployment now for increased unemployment in the future aggravated by all the other problems mentioned above.

This is an option that hardly anyone would advocate. Therefore monetary expansionism must be a product of inadequate economic understanding, or something more nefarious. It is also possible that these long term costs are ignored because the politicians who implement the policies are only concerned with the effects that are observed during their own terms in office (Hoppe, 2001). If that is the case, then they would be right in choosing those means for their goals, and while economics can prescribe means for goals, it does not pass judgment on the goals chosen. Even so, it is the role of economics to demonstrate to those who will suffer the consequences of such policies what emanates from their rulers' decisions.

7. Defending the Philips Curve

Do we reject the Philips curve in its entirety? We do not. There is nothing at all untoward about exploring the relationship between, indeed, *any* two variables. Inflation and unemployment certainly qualify in this regard. Our objection is not to the curve itself, but to its *downward slope*. This depicts a trade-off between the two. We maintain, much to the contrary, that there is no such trade-off. We do not attain more of either one if we have less of the other. Instead, the Philips curve should be *upward sloping*. The more inflation, the *more*, not the less, unemployment that will result, *ceteris paribus*.

Why is this? As we have seen with our analysis of ABCT, inflation misallocates resources, with undermines employment, i.e., leads to joblessness. All of this misallocation, and then reallocation, puts pressure on employment. Workers are not immediately employed in different jobs. This process takes time, during which unemployment increases. The Philips Curve is itself an "innocent" model. The negative public policy implications derive, not from the curve itself, but rather from its downward slope. All men of good will would wish to reduce involuntary unemployment. If inflation will do so, given the negative slope of this curve, this would appear to support money creation. But, with the more accurate upward slope, all bets are off in this regard. No longer would benevolent public policymakers be tempted to support inflation as a means of combatting unemployment. Now this nefarious policy will be correctly seen as an exacerbation of joblessness.

[15] The same reasoning can be applied to many other government programs. The inadequate evaluation of the real consequences of central planning is one of the core causes of the constant expansion of government, as observed in almost every country. See on this Mises (1922).

8. Conclusion

We have found that monetary policy is not the proper means for the ends usually proposed by its advocates, namely reducing short term unemployment, with inflation as the only cost. This might happen because the proponents of such policies do not fully understand the implications of their plans, that is, they are not familiar with the Austrian Business Cycle Theory and the other concepts used in this paper. Alternatively, it could also be that such plans are not conceived for the purposes officially stated, and are in fact designed to trade future prosperity for present favorable political conditions.

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