Cantillon Effects

Within the Austrian School of Economics, Cantillon effects serve as an argument supporting Mises’ claims about the negative impacts of adding an additional monetary unit into an economic system. In this article, we will show that it is not possible to use Cantillon effects without presuming objectivity of money (as does Mises). This means that they do not have such explanatory character attributed to them by the Austrian School today. As we will show, Cantillon effects can only be attributed to political interventions.

Cantillon argued that changes in the money supply cause unnatural changes in relative prices of goods. Increasing the money supply, e.g. by gold or silver miners who mine a new unit of a commodity that is subsequently allocated for consumption, will cause an increase in demand for consumption goods and therefore it increases the price level, which causes economic expansion. This expansion, however, will later reverse due to a rise in prices, increase in cheaper imports, and a subsequent outflow of money from the economy. Cantillon also pointed out that price inflation does not affect all prices in the same way or at the same time, and its spreading is dependent on the behaviour of money owners.

The fact that Cantillon effects do not have an explanatory character when dealing with a catallactic (natural) economic process can be proven by applying the presuppositions of the effects on goods other than money, or on a moneyless economy. Goods other than money are utilised as consumable goods, or they enter the economic process as capital goods. They are also added and subtracted from the economic process. The change in their quantities must therefore inevitably change their relative relationships to each other, and cause redistribution of wealth. For example, holding of any good in order to ensure future liquidity (hoarding), or adding a new unit of the good onto the market, or even physically destroying it, will have an inevitable effect on the exchange ratio (price) of that good held by another subject on the market, and therefore also on the redistribution of wealth. However, claiming that such a redistribution of wealth is a non-catallactic state is a subjective judgement, effectively saying that people voluntarily engage in something in which they should not engage.

To consider Cantillon effect claims associated with money in the catallacti system as correct, one has to consider money as a special good whose purchasing power is objectified. Otherwise, the conclusions do not apply. Why? For all other goods, the exchange ratio (“purchasing power” of goods) is dependent on how goods are inversely arranged on the preferential scales of participants of exchange. However, as we have shown above within the system of other goods, we cannot say that there is a non-catallactic (unnatural) conditions in terms of changes in their exchange rates (i.e. changes in price level) and the re-distribution of wealth; except we would say that people are doing something voluntarily, what they do not. It follows, mutatis mutandis, that if money are to be considered as identical good as any other, they would not be able to pay for Cantillon’s effects.

Mises’ claims about an unnatural redistribution effects of new monetary unit into the economic system and an unnatural change of the overall price level of goods in case of any kind of addition of a new monetary unit are therefore facing a logical inconsistency. Either a monetary

1 Listen e.g. to podcast Dorobăț, C: Cantillon Effects: Austrians vs. the Mainstream. <https://mises.org/library/cantillon-effects-austrians-vs-mainstream>
good is a good that gains its purchasing power on the basis of the theory of subjective value - then, however, it cannot be the case that it causes unnatural redistribution of wealth and price changes, or money is a special good with an objectivised objective purchasing power - which would then imply that any addition of an additional monetary unit into the economic system causes redistribution of wealth and an unnatural change of the price level, and ipso facto a change of purchasing power of money. Mises undeniably leans towards the second option, which allows us to claim that he objectivises money. This is problematic, because it causes an inconsistency in the theory.

The reason for this objectivization is that Mises treats money as a good per se\(^3\), and not as a good that satisfies an abstract need in the form of exchange in time per se, i.e. a decision of two subjects to satisfy each other’s needs indirectly in time. At the same time, money itself does not make exchange possible, but easier. Money, therefore, only facilitates exchange more easily. The act of exchange cannot ever be neutral, and must always have an effect on price changes and redistribution of wealth within the economic community. The important thing to ascertain, however, is if this process is catallactic or non-catallactic in nature. Catallactic addition, or money hoarding (and subsequent free banking activity), is a process connected to facilitating a marginal unit of exchange, i.e. a marginal decision of two subjects that they will indirectly satisfy each other’s needs. The consequential change of the price level in time and redistribution of wealth are then optimal. And that is regardless of the fact that the price level, which is an expression of prices of other goods in money and an inverse phenomenon of the purchasing power of money, is changed also on the basis of the fact that the number of monetary units has changed. The subjective use value of money does not coincide with their subjective exchange value, as Mises claims. Money as a real good allows us to react to an abstract need of an easier facilitation of exchange. The fact that this need does not involve only one, but at least two subjects, allows us to treat it as different from the needs of only one subject\(^4\).

Exchange value is attributed to money from the perspective of two subjects, where these subjects react to their individually perceived, but also necessarily collectively perceived (and therefore shared) need for indirect satisfaction of their needs. Usefulness derived from the exchange value is then perceived by subjects individually, in a context of calculational options of exchange in time, or other functions that money has in time.

Therefore, a demanded addition of a marginal unit of money has no way of changing the purchasing power of money, because the provision of an additional unit of money was voluntary. If, however, we talk about a non-catallactic action (political intervention) connected to adding money and its forced hoarding, then the resulting change in prices and redistribution

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\(^4\) Here we can see what the goals of action and media of action are. During an exchange of, for example, an apple for an orange, the apple and orange themselves are not the goals of the exchange for either party. The exchange is conducted through media, and the goal of the exchange is e.g. the consumption of the apple or the orange to satisfy a craving for its taste. See in Latham, K.: Dr. Hülsmann and the Pure Time Preference Theory of Interest. WWW DOCUMENT <http://csinvesting.org/wp-content/uploads/2015/04/latham_interesttheory.pdf>. It is also necessary to treat the act of exchange itself in the same way. The act of exchange is a means for achieving some goals of the subjects, and we can therefore treat it as a unit of something per se.
of wealth is clearly not optimal. This is because the above described process, i.e. voluntary indirect satisfaction of needs, is disrupted and replaced by some kind of political process. It is therefore more appropriate to talk about a catallactic (without political intervention) and non-catallactic (with political intervention) effects of adding of monetary unit (and related subsequent banking activity). We will demonstrate the possibility of applying and not applying Cantillon effects in the following four thought experiments:

Let us suppose that a person in an economic community has significantly increased his wealth. During his life, this person provided relevant goods to other humans. For some reason, however, he took a significant portion of his gained gold (money) from the market – he stored it. Let us suppose that this person owned a half of all existing supply of gold in this given community. Before his death, however, he decides to give all his gold to people under 150 cm tall in one day. What would happen? People shorter than 150 cm would get richer. Let us say that they would buy goods for their newly gained gold, which would raise prices in the community. What can we say about this situation? In principle, nothing. Why? The community would not be wealthier at the moment of redistribution, but remember that the gold was gained in the past for services provided to the members of the community. Society has therefore increased its wealth before the bequeathing of gold, redistribution of wealth, and subsequent price increases took place. The objective exchange value of gold has remained, and the only that changed is the price of gold relative to other goods. The price level increase (uneven, but total) in the economy would be optimal and proportional to the amount of gold added through demanded new mining between the beginning of hoarding by the rich person and the redistribution, and the extent of produced wealth in the given community at the time of the redistribution of the hoarded gold.

What if, however, this rich person gained their gold through theft, slave labour, or warmongering, and then, same as in the previous example, gave it away, causing price increases and redistribution of wealth? From a point of view of economic behaviour optimality, we should state that because the rich person stole, waged wars and utilised slave labour, they created an involuntary transfer of wealth in time. Namely from the slaves, victims of war, and victims of theft to the people who gain the gold at the time of redistribution. The resulting prices are of course not optimal, because the atrocities committed by the rich person had to inevitably alter the rate of satisfaction of needs in some community, and the final act of redistribution to everyone who is shorter than 150 cm cannot be considered as optimal.

The third example has to do with a situation where the emission is affected by some kind of monarch. Let us say that at the beginning of his ‘career’, this monarch creates a coin bearing his likeness, representing an ounce of silver. Halfway through his career, however, he changes the ratio of silver in the coin from one ounce to half an ounce, with the rest being made of copper. The coin looks almost the same, but it has a different ratio of metals (money). What can we say about this act economically? That depends on what this ruler did between the beginning and middle of his career. If he was waging wars, having fun, and instead of legitimate services only provided services of the ‘bread and circuses’ character, while unable to finance his expenses from taxes so he went into debt, changing the coins’ contents would enable him to socialise the financing of his debts. Considering that he used the debt to finance services that were anti-social (war), or nonsensical from the point of view of the most pressing needs of the populace (he would for example organise tournaments for the amusement of a small portion of the populace and not invest into building roads), the socialisation of debt and changing of the
coins’ content would be results that unproductive services being provided to the community. The change would cause a redistribution of wealth from providers of relevant services to providers of irrelevant ones, which would also change the price structure of goods as well as the results of economic processes. And if this socialisation of debt continued, i.e. the same thing would occur until the monarch’s death, we would be witnessing constant change of price levels and misallocation of capital. The resulting effect of diluting a coin’s purchasing power and increasing prices denominated in the coin (uneven, but total) in the economy would not be optimal, but it would be proportional to the rate of socialisation of debt of the monarch, relative to the economic activity undergone to gain copper due to socialisation of debt, natural increase of silver and copper in the community relative to the existing wealth in the community.

The last example deals with a presupposition that competing fractional banks operate in the community. These hold a portion of gold as their reserves and emit competing currencies that represent a certain weight of gold. Since these are fractional banks, the currencies – debts / IOUs – are emitted not only against gold in the reserves, but also against economic projects. People accept them. Let us suppose that they do so because they cannot find any other and better alternative. Since currencies are also emitted against economic projects and not only against gold, currency valuation, i.e. insertion of a currency into a subject’s preferential scale, depends on whether the purchasing power of the currencies (the absolute exchangeability of a given debt – currency) and their price (number of units of the currency relative to other goods) are backed by useful and productive economic activity. Let us also suppose that not every entrepreneurial activity in the community is successful, we are after all imperfect, and the that the rate of unsuccessful projects is 10%. To simplify the argument, these projects will cause complete economic loss, i.e. the realisation of an unsuccessful project will consume goods that are then not usable in any further economic process. Banks, in order to remain on the market, will cover that loss by emitting 10% of counterfeit currency, i.e. they will emit a currency that is not backed by any economic activity – it will be a fake bill of exchange. What can we say about this presupposition, that will necessarily change the price level and cause a 10% socialisation of debt through price inflation? Will the prices be optimal in this case? If the community has a free competition of banks, and people still accept the currencies voluntarily, there is no reason to think that prices are not optimal. The community voluntarily accepts a 10% socialisation of losses related to the bank sector’s credit. Why would people do that though? Given presumptions would imply only one thing. The alternative in this community must be more expensive, i.e. any other alternative would cause them greater expenses related to the realisation of debt exchange. Maybe they would have a form of more strict conditions of credit, or maybe there is not really anyone else in the community who can do bank business better, or for any other reason that causes the community accepts and voluntarily adapts to the 10% debt socialisation and the resulting price changes.

The first and the fourth example are a simplified description of a catallactic community that of course does no exist. The first example presumes superhuman ability of one person to fulfil other people’s needs. The fourth contains an implicit presupposition of non-existence of evolution of the banking sector, improvement of banks’ investment estimations, or of other pressures on lowering the rate of loss socialisation that competitive banking activity should provide. The fourth example, however, illustrates that some sort of socialisation of loss must exist in every economic community by definition, because we are fallible. The second and third
examples are not extraordinary in any way. They illustrate day-to-day political reality. However, it is only such a reality that Cantillon effects can be applied on.

The general validity of Cantillon effects is often demonstrated on the price increase of the 16th century; so called Price revolution or Spain price revolution\(^5\). This event is traditionally explained as caused by adding new monetary units – silver – to the economic community caused a yearly inflation of 1 - 1.5%, where as a consequence prices more than doubled during the century, and for some goods they even quintupled. A more detailed look on the period in question will clearly show that Cantillon effects are even in this case related to political interventions and we cannot talk about any kind of natural impact of adding new monetary units. So, what happened then?

Charles V and his son Philip II were no enlightened liberal monarchs\(^6\). And the same could be said about their predecessors and descendants. Quite the contrary. Both kings significantly increased Spain’s debt and used finances to wage wars. It is not a surprise to find out that their reign was supported by the banking cartels of the Fugger family, or the Genoa banking cartel. Charles V never really went bankrupt, but he was not far from it, and the price for avoiding bankruptcy was relatively high. Of course, Charles wasn’t the one who paid it. It doesn’t come as a surprise that the main collateral for his debts were American colonies, and their silver mines, which were one of the reasons he did not go bankrupt. Colonies serving as collateral faced an explicit enslaving of the local populace and unlimited ‘reign’ of the banking cartels; for example in Venezuela together with ample protection from the armies of the Spanish crown. Philip II did not inherit his father’s ‘luck’. He declared bankruptcy four times, and on debts which he used to roll over his long-term debt, as a consequence of the crown’s (partly inherited) indebtedness. Philip was able to spend 87% of the state’s yearly tax income on war efforts. Mining in the New World’s mines was of course realised using slave labour under a state monopoly. Spain also restricted exports of imported silver, which only increased the inflationary pressures within the country, and eventually even outside of it.

What are we looking at then? Definitely not at a natural rate of adding a new monetary unit into circulation and resulting inflation. On the contrary. We are looking at socialisation of Spain’s debt throughout the 16th century. Inflation was merely a consequence of these policies. This is a combination of the above-mentioned examples 2 and 3. While, for example, Roman emperors\(^7\) were, same as Charles’ and Philips’ predecessors, forced to socialise their debt by falsifying the genuineness of their coins, these Spanish kings were ‘somehow fortunate’ and their descendants socialised debt through new and relatively cheap mining. The resulting inflation was therefore not a consequence of a natural addition of new monetary units, but of socialisation of debt. And one of the reasons for its spread into the whole of Europe is that the banking system then was already quite globalised. The Spanish crown socialised debt to the

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5 See e.g. in HOLMAN, R. Dějiny ekonomického myšlení. WWW DOCUMENT <https://books.google.cz/books?id=qttgR6MPx18C&pg=PA26&hl=sk#v=onepage&q&f=false>

6 See in more detail in Jeon, B.S.: Sixteenth-Century Spanish Fiscal Mismanagement and Debtor Emperors: An Economic History Review of Spain under Charles V in 1528 and under Philip II in 1575. WWW DOCUMENT <http://repository.cmu.edu/cgi/viewcontent.cgi?article=1205&context=hsshonors>

7 See e.g. in Pepen, J. R: Inflation and the Fall of the Roman Empire. WWW DOCUMENT <https://mises.org/library/inflation-and-fall-roman-empire> „By the time of Trajan in 117 AD, the denarius was only about 85 percent silver, down from Augustus's 95 percent. By the age of Marcus Aurelius, in 180, it was down to about 75 percent silver. In Septimius's time it had dropped to 60 percent, and Caracalla evened it off at 50/50.“All
detriment of productive activity of the rest of the world. This claim is also congruent with the recent findings that silver from the New World started circulating in European coins a lot later than previously thought, and a lot later than the inflation started manifesting itself\(^8\), i.e. the Spanish crown first increased and rolled over their debts and only after that it started repaying them with a relatively cheap mining of silver from the New World. It took until the reign of Philip V (1700 – 1746) that New World’s silver made up 100% of Spanish coins.

Matúš Pošvanc, 1.6.2018

\(^8\) See e.g. in ScienceDaily. *Silver from the Americas may have entered the Spanish economy later than thought.* WWW DOCUMENT <https://www.sciencedaily.com/releases/2011/06/110608122059.htm>