Family Destructionism:

Hyperinflation and The Familial Institution in Weimar Germany

JEL Classification: D10, N14, Z1

Abstract: This paper investigates the relationship between inflation and the family. Specifically, this paper seeks to address the question: does monetary inflation lead to a decline in the institution of the family? The first section of the paper develops a theoretical model to examine the relationship between the family unit and a regime of monetary inflation. The second section of the paper uses Weimar Germany as an empirical case with both statistical data and primary sources to test the model. This paper contributes to the developing academic discourse on the relationship between inflation and culture.

Keywords: Economic Calculation, Family, Inflation, Weimar Germany

Samuel D. Peterson

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"For individuals and businesses, it became impossible to establish the most rudimentary life plan. Some level of predictably, the necessary precondition to any kind of future planning, had been completely destroyed by hyperinflation" (Weitz 2007, 140)

Introduction

From Smith's discussion of the family in his *Wealth of Nations*, to Becker's *A Treatise on the Family*, economists throughout history have applied insights of economic reasoning to the institution of the family. Simultaneously, sociologists and some economists have written about the decline of the family.[1] While there is literature discussing how price increases affect the family,[2] little theoretical work has been done to understand the causal link between monetary inflation and the decline of the family. The causal relationship between economic inflation and the decline of the family has yet to be explained. This paper addresses this topic.

The family, like every other institution, is made up of individual actors. Individuals face incentives that either promote or hinder certain behaviors and decisions; such as whether to marry, have children, and/or divorce are shaped by constraints that individuals face within the world. Even the decision to have an abortion is affected by the incentives faced by an individual. Through these decisions, families are formed, maintained, broken, or not created in the first place. Therefore, the institution of the family is affected by the conscious actions of people, which in turn are shaped by incentives. Inflation raises the cost of forming and maintaining families, leading to a decline in the familial institution.

[1] See Nisbet 2010 and Schumpeter 1950.
[2] See Degner 2019.

Section I - Theory

Inflation and Price Increases

Many people use the terms "inflation" and "rising prices" interchangeably; however, they are distinct phenomena. It is crucial to understand the causal link between monetary inflation and price increases. Inflation, simply put, is an increase in the money supply. Inflation can occur in many ways, whether it be through counterfeiting, quantitative easing, or fractional reserve banking. However, what is undoubtedly the most common way inflation occurs historically is through a central bank printing new banknotes. For this analysis, we will use a central bank as our inflator.

As a central bank increases the stock of money, the supply of money shifts to the right. There is now an excess supply of money ($Q_d < Q_s$) at the prevailing purchasing power. In other words, individuals do not desire to hold onto as much money as they now have. Since people do not want to hold this new money, they spend it, shifting consumer goods and producer goods demand curves to the right. The shift in demand curves means that prices for consumer and producer goods will increase. It is important to note that the newly created money must enter the economy at a specific point and place in time. The increased stock of money is spent by some first, at specific points in the economy, changing the structure of production and shifting demand curves to the right. Money will continue to be spent until $Q_d = Q_s$.

The process of monetary inflation by a central bank can continue or end depending on if they continue to increase the money supply or not. At a certain point, the central bank has printed so much money causing prices to drastically rise that the currency is no longer simply “inflated,” but rather, “hyperinflated”.[3]

Inflation and Economic Calculation

Money prices sit as the basis for humans to be able to engage in profit and loss accounting and economic calculation. Whether a newly opened bakery is profitable or not comes from money prices. If the baker earns $100 from selling his bread and the bread only costs $70 to make, then he has gained a profit of $30. Yet if the baker only earned $50 from his bread and it still cost him $70 to make, then the baker has earned a loss of $20. The ability to see what is profitable and what is not is central to the production of goods and services all throughout the economy. Inflation, especially hyperinflation, creates monetary chaos where it becomes nearly impossible to effectively engage in economic calculation. If factor prices continue to rise and the purchasing power of the currency continues to drop, how can one effectively see if he has made profits or suffered losses? The rapid decline in the value of money prevents individuals from seeing the monetary costs of their actions. Ludwig von Mises noted the link between economic calculation and inflation. Mises (2015, 496) writes, “By destroying the basis of reckoning values - the possibility of calculating with a general denominator of prices which, for short periods at least, does not fluctuate too wildly - inflation shakes the system of calculations in terms of money, the most important aid to economic action which thought has evolved.” Inflation erodes the ability of individuals to engage in economic calculation.

[3] Hyperinflation is typically defined by economists as when prices have risen by more than 50% in one month.

Economic Calculation, Future Uncertainty, and Time Horizons

Prices sit as a base for individuals to plan for the future. Future prices that consumers are willing to pay for apples will determine if, and how much, the apple farmer will plan to grow. While the future will always remain uncertain, the degree to which the future is uncertain becomes distorted through a general rise in prices. If a farmer sees that the price of his apple has ranged from $0.90 to $1.10 over the past ten years, it is safe for the farmer to assume that the price will not be greater than $1.00 by plus or minus $0.10, holding all else equal. The farmer can effectively plan that the future price of his apples will not dramatically fall to $0.00 overnight, nor will they skyrocket to $1,000. This principle also applies to the factors used to produce the apple. *Ceteris paribus*, if the purchasing power of money has stayed relatively steady allowing prices to stay more-or-less consistent, then the farmer can safely predict that their prices also will not drastically increase or plummet.

Now, what happens to the farmer's future expectations if the purchasing power of money falls? Over time, the farmer sees that the money he uses to purchase factors and receives from selling his apples becomes worth less and less. If this persists over time, the farmer can safely assume that the value of money tomorrow will be worth less than the value of money today. Thus, the farmer will know that in order to gain the most from his money, he will need to sell his current stock of apples today. This, of course, also applies to the apple's factor goods as well. The farmer knows that he must buy the factors today in order to get the most out of his depreciating money. In other words, the apple farmer has inflationary expectations.

With inflationary expectations, individuals change their behavior regarding present consumption and future savings. "People [with inflationary expectations] now know in their hearts that prices will rise substantially in the near future. As a result, they decide to buy now—

to buy the car, the house, or the washing machine—instead of waiting for a year or two when they know full well that prices will be higher" (Rothbard 2008, 67). Inflationary expectations change one's view of the future, leading to a change in their present actions in the present.

Through inflationary expectations, individuals alter to a more present form of consumption, increasing their time preferences. "Once the future value of money becomes impossible to reliably forecast, ordinary people lose the ability to preserve their accumulated savings and thus become incapable of planning for the future" (Salerno 2013, 19). Salerno continues to note that, "instead [of saving,] they are compelled to passively experience time like beasts do, as mere duration. This leaves them little recourse but to dissipate their wealth and energy in seeking after immediate gratification." Under a price inflationary environment, the opportunity cost of saving is increased, giving individuals an incentive to spend their money now as its relative future value is reduced

The increase in time preferences caused by inflationary pressures causes present savings to decrease. Since individuals are consuming more money in the present the structure of production will not be expanded. "But the moment inflation passes a certain point the picture changes. It begins to promote destructionism not merely indirectly by disguising the effects of destructionist policy; it becomes in itself one of the most important tools of destructionism. It leads everyone to consume his fortune; it discourages saving, and thereby prevents formation of fresh capital" (Mises 2015, 496). Naturally, the stagnation of future savings means that there will be less available to consume in the future. The quality of life will not be raised as new technologies created through saving and investing will not exist.

Inflation and Children

“It may be summed up in the question that is so clear in many potential parents’ minds: ‘Why should we [have children and therefore] stunt our ambitions and impoverish our lives in order to be insulted and looked down upon in our old age?’” (Schumpeter 1950, 158). Schumpeter reminds the reader that the act of having children is not a costless one. While children may reap parents' immense amounts of psychic profit and joy, children still cost families enormous amounts of time and money. Children, additionally, have the potential to diminish psychic profit in their parents if the relationship between child and parent is weak or undeveloped. Under an inflationary environment, the costs of having and raising children are increased. Ceteris paribus, it can therefore be stated that birth rates will decline under an inflationary regime.

Opportunity cost is essential to understanding the effects of inflation on parents' decision to have children. Since under an inflationary environment the purchasing power of money is declining, parents have new decisions to make regarding the future. To compensate for the fall in purchasing power, individuals can work more hours or take on additional jobs in order to meet the previously held standard of living in a non-inflationary environment. The opposite of this decision is for individuals to accept their declining purchasing power and thus necessarily the fact that they will not have as many goods. Both of these decisions raise the opportunity cost of having children. If one decides to work more, this means necessarily they will have less time at home to spend with their children, thus the ratio of hours worked to hours spent with children rises, eliminating marginal parent(s). On the other hand, if a parent(s) prefers to spend more time with their children in an inflationary environment, they necessarily sacrifice their standard of living. This will eliminate the marginal mother and father who do not desire sacrificing their standard of living for children.

Under inflationary expectations, individuals change their time preferences to be more present-oriented. Consequently, there is less capital saved for future gratification. The rearing of children is a capital-intensive project. Children need to be fed copious amounts of food in order to survive and grow before they can start bringing in monetary gains for the family. Under stable market conditions, where the purchasing power of money stays relatively the same, parents can divert capital for their children in the future. Parents know within a certain number of months their child will be born, so they start saving in the present. Additionally, some potential parents may only want to try to have children if they are in a well-off enough place, which requires further savings. However, inflation distorts the normal market process. Prices rise from an increase in the money stock, meaning that the marginal cost of saving is raised. Therefore, some individuals will not have the capital necessary to raise a child. As such, the marginal parent(s) will make the decision to forego having children.

Inflation changes the costs and benefits of having and maintaining children. The marginal costs of having children are increased, leading to individuals either not having children or having fewer children. Consequently, the institution of the family declines.

Inflation and Marriage

Just as with the decision to have children, the decision to get married and divorced are also affected by inflation. Depending on the time period and society, marriages are formed through a variety of different norms and customs. In the West, new families have generally been formed either through arrangement by parents or through a process of courtship. Both arrangement and dating allow would-be spouses and their families to see if the other families or spouses are trustworthy actors. It must be noted that both arrangement and dating cost individuals time and money (Becker, 2009). Under inflationary conditions, the cost of engaging in the process of marriage formation increases.

Arguably the most well-known way that marriages are formed is through a process of dating. Dating involves many rituals and customs that enable actors to signal their intent, trustworthiness, credibility, and love to potential partners. If all goes well, partners will have formed a new family by getting married. One such way of doing this is by taking the other partner out on a date. A date allows partners to learn more about each other and signals intent, seriousness, etc. Another way of signaling in dating comes through the act of gift-giving. Giving gifts transfers property from one party to another, meaning that reneging on the dating arrangement is more costly for the gift-giver. However, as purchasing power decreases and prices rise, the cost of engaging in these activities becomes more costly. Therefore, the marginal daters are eliminated from the dating market, and the marginal gifts given are also reduced. From this, *ceteris paribus*, there will be fewer marriages formed under a state of inflation compared to that of a stable monetary regime.

While inflation leads to an increase in the marginal cost of getting married, thus potentially leading to a decrease in the overall number of marriages formed, inflation also increases the marginal cost of staying married. "The causal link between the rising price of consumption goods and divorce begins when spouses must increase the quantity of labor supplied to maintain the same levels of spending and leisure as they had previously enjoyed. This then leads to a decrease in the time spent on leisure and household production, leading to relational tension and conflict" (Degner 2019, 229). Since marriages are formed and maintained around and through experiences with a partner, under an inflationary environment, the marginal cost of engaging in these activities is increased. As individuals change their behavior to offset the increased cost of living, less time is spent with their spouse. As less time is spent with their spouse and/or less is done to maintain the relationship, tensions rise, leading to things such as divorce. Inflation changes the costs and benefits of being married. The marginal costs of being married are raised, leading to divorce and separation, and thus a decline in the family as an institution.

Section II – Empirical Analysis

Weimar Hyperinflation

The hyperinflation experienced in Weimar Germany is one of the most well-known examples of the destruction caused by rapid increases in the money supply. "On the afternoon of July 31st, 1914, the Reichsbank, on its own initiative, suspended the conversion of notes [for gold] ... On August 4th, the conversion of notes was suspended by law..." (Bresciani-Turroni 2013, 23). With the outbreak of World War One, the German central bank responded to political incentives and abolished the internal gold standard. With the breakage of the link between gold and paper banknotes, the central bank's incentive to not print banknotes in excess of their gold supply was eliminated. With the abolition of the gold standard in Germany, the money stock was to be continually inflated so that, "within the two weeks from July 24th to August 7th the Quantity of Reichsbank notes in circulation increased by more than two milliard marks" (Bresciani-Turroni 2013, 23). However, this increase of the money stock did not end with the singing of the Armistice. Rather, the printing of currency continued until November 15th, 1923, bringing the total amount of paper marks to 92.8 trillion (Bresciani-Turroni 2013, 23).

Through the continual increase in Germany's money supply from 1914 to 1923, the value of the mark practically plummeted to zero. The monetary chaos caused the central bank to introduce the "rentenmark" in November of 1923, which is often regarded as a successful stabilization of the national currency, effectively ending Germany's inflationary crisis. (Graham, 1930). The period from 1921 to 1923 is often regarded as the worst of Weimar Germany's inflation crisis. The increase in internal prices caused by the central banks increase of the money stock can be seen below (Maier 1987, 198).

Percentage increases in internal prices	
Year	*Percentage Increase*
1914-1918	140%
1919	223%
1920	67%
1921	144%
1922	5,470%
1923	75,000,000,000% (75x10^9)

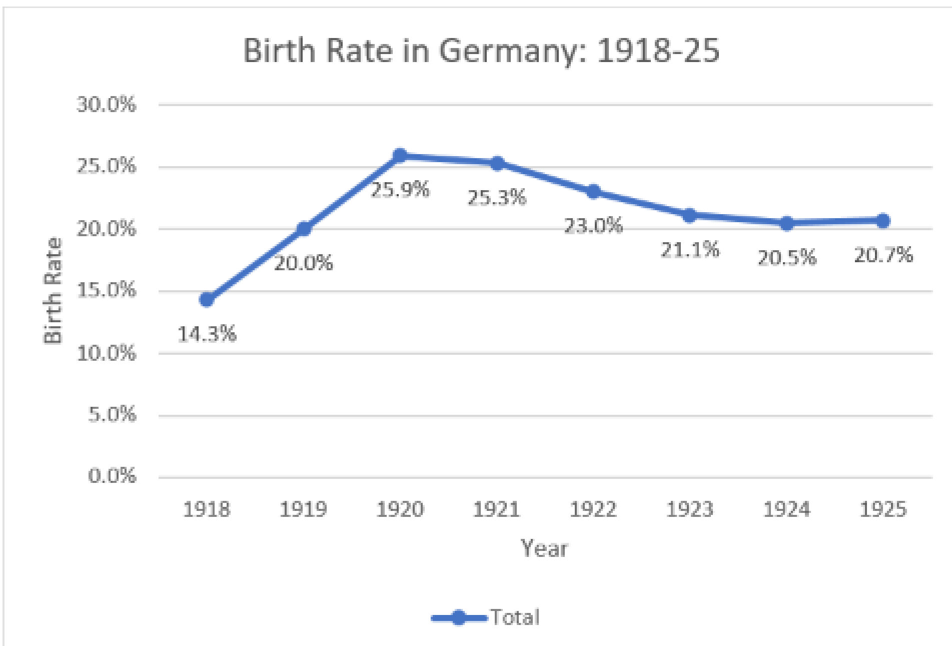
Due to the rapid price increases, the incentives for German citizens to hold money changed, affecting both their perception of the medium of exchange and their future uncertainty. Weimar's currency had become so depreciated that citizens flocked to store their value in anything other than the state-sponsored currency. "By the middle of 1923, the whole of Germany had become delirious. Whoever had a job got paid every day, usually at noon, and then ran to the nearest store, with a sack full of banknotes, to buy anything he could get, at any price. In their frenzy, people paid millions and even billions of marks for cuckoo clocks, shoes that didn't fit, anything that could be traded for something else" (Friedrich 1972, 124). This flight to spend, of course, arose from inflationary expectations within the Republic. A contemporary writer described hyperinflation in 1923 Berlin as follows: "It pounds daily on the nerves: the insanity of numbers, the uncertain future, today, and tomorrow become doubtful once more overnight. An epidemic of fear, naked need: lines of shoppers, long since an unaccustomed sight, once more form in front of shops, first in front of one, then in front of all. No disease is as contagious as this one" (Kaes, Jay, and Dimendberg 1995, 63). Finally, it must be noted that German firms, not just consumers, changed their behavior due to German hyperinflation. "By the fall, workers were being paid every two or three days, and sometimes twice a day. Firms used multipliers to calculate wages one day, the set wage times 27 billion; a few days later, the set wage times 67 billion." (Weitz 2007, 136).

The epidemic of price increases caused by central bank money expansion led to an inability for individuals and firms to economically calculate with money prices. The continual increase in prices led individuals to drop the mark and start using barter as a means of exchange. Additionally, future uncertainty had drastically risen throughout the whole of Weimar German, with the only commonly believed fact about the future being that money prices would continue to increase, and the purchasing power of the mark would fall.

Weimar Hyperinflation and Children

The hyperinflationary period in Weimar Germany not only had a profound effect on businesses, but it also had drastic ramifications for the family. Through the decline in their purchasing power, individuals faced a decision of whether or not to accept a lesser standard of living or to work to retain their per-inflationary standard of living. Those who desired a higher standard of living would have to work more, while those who did not want to give up their leisure time had to accept a lower standard of living. This meant that future parents would either have less time to spend with their children or that their children face a lower quality of life. One author notes that "it is worth emphasizing that hunger remained a common experience for many in the inter-war years. Working-class budgets were simply not elastic enough to handle emergency expenditures and life was full of them" (Rossol and Benjamin 2022, 484). Since those who desire children are generally not those who wish to see their children harmed, the decline in the overall quality of life in Weimar Germany led to marginal parents not having children. "For the poor and the unskilled, living on relatively fixed welfare payments and wages, the situation was utterly catastrophic, and the more children to feed, the more difficult the situation" (Weitz 2007, 136). Additionally, those who valued their time more than a higher standard of living meant that they would not be willing to set aside the necessary capital to have a child. These factors and many more relating to inflationary future expectations led to a decline in the number of children born in Weimar Germany.

With the increase in the opportunity cost of having children, Weimar citizens gave birth to fewer children. The chart below illustrates the results of Weimar inflation on birth rates (Sensch 2022).



In 1920, the birth rate in Germany was 25.9%, up from 1918's 14.3% and 1919's 20%. This rapid jump in birth rate likely has to do with the demobilization of German troops and a belief that society would return to its prewar standards (prices included). In 1921, though, the birth rate started to decline, lowering to 25.3%. By 1923 the birth rate had declined to 21.1%. Though there were many factors that affected Weimar parents in their decision to have children, inflation certainly was a marginal factor that led to a decline in the birth rates.

Weimar Hyperinflation and Marriage

Weimar hyperinflation, additionally, affected marriage within the Republic. During the inflationary period, both the marriage rate declined and divorces increased. As has been mentioned, under inflation the cost of engaging in the process of forming a marriage, whether it be through arrangement or dating, is increased. Gift-giving and dating activities like picnics or going to restaurants become more expensive relative to pre-inflationary times as individuals are required to give up more time to afford them. Those who are not willing to give up their time will not form relationships and thus will not get married. The chart below illustrates the results of Weimar inflation on marriage rates (Sensch 2022).

Marriage Rate in Weimar Germany: 1918-1923	
Year	Marriage Rate
1918	5.4%
1919	13.4%
1920	14.5%
1921	11.9%
1922	11.1%
1923	9.4%

Just as with the Weimar marriage rate, demobilization and a belief that German society would return to normal, pre-war standards (prices included) led to an increase in the number of marriages formed from 1918-1920. However, with the start of the period of hyperinflation in 1921, the marriage rate began to decline.

Additionally, the cost of individuals supporting their parents and siblings in addition to starting or supporting their own new family was increased. A writer living in Weimar Germany noted that “Moreover, no one familiar with contemporary economic conditions can ignore the fact that the average young woman seeks employment prior to marriage and that families are not in the position of supporting daughters who are capable of working until they are married" (Kaes, Jay, and Dimendberg 1995, 212). Another Weimar contemporary noted that "As a rule, caring for the family should be regarded as a full-time female occupation. The increasing number of women employed outside the home, however, indicates that it is not personal choice but economic necessity that determines their actual decision to seek employment" (Kaes, Jay, and Dimendberg 1995, 212). For the time in which these statements were written, it was common for women to stay at home with their children and act as a "homemaker," hence why the author notes that women "should regard [the family] as a full-time female occupation."

Weimar inflation also led to an increase in the divorce rate. As has been stated, price increases mean that individuals must work more to maintain their previous standard of living. This necessitates that there will be less leisure time between husband and spouse. As the spouses spend less time together, their relationship is less maintained and marital strife becomes commonplace. When this happens, divorces occur. Weimar Germany experienced what one contemporary author described as "an epidemic of divorce" (Kaes, Jay, and Dimendberg 1995, 77). "Between the years of 1909 and 1913 the divorce rate had averaged 24.6 per 100,000. By 1921, however, it had risen to 62.9 per 100,000" (Stiglich 2014, 24).

Under Weimar Germany's hyperinflation, the cost of getting married and staying married was increased. This is seen through both statistical data and primary documents.

Conclusion

Inflation changes the incentive structures of individuals and their actions. Inflation, properly defined, is an increase in the money supply. When the supply of money increases, there exists excess money relative to people's demand to hold money, so consumers spend their excess cash balances, shifting demand to the right, increasing prices. Inflation's price increases distort the ability of market actors to economically calculate using money prices. This increases the future's uncertainty, causes inflationary expectations, and leads to a general increase in time preferences as the cost of saving under an inflationary environment increases. Under inflation, the opportunity cost of having children is increased. The cost of saving for children under inflation is also increased. Both of these will eliminate the marginal parent from producing or maintaining children. Inflation also promotes divorce and raises the costs of forming marriages. Both of these lead to a decline in the family institution

In Weimar Germany, the money supply had been continuously increased to the point where the German Mark had become virtually worthless. Individuals, faced with declining purchasing power, turned to alternative modes of exchange and often engaged in barter. The inflationary environment caused both birth rates and marriage rates to decline. Additionally, hyperinflation was also a marginal factor in the increase in the number of divorces in Weimar Germany. This fundamentally altered the social structure of Weimar Society. Hyperinflation led to a decline in the familial institution in Weimar Germany.

Further research on Weimar inflation and the family institution could focus on how credit markets affected individuals' demand for and supply of housing and whether or not this led to a decline in the family. Additional research could also explore the relationship between abortion, child abandonment, and inflation.

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