

Globalization and Inflation

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Globalization is a force that has defined the latter portion of the last century and continues to exert a strong influence on world political and economic affairs today. Joseph Stiglitz, Nobel laureate and ex–chief economist of the World Bank, defines globalization as:

“The closer integration of the countries of the world as a result of the lowering of communication and transportation costs and the elimination of man–made barriers.”¹

Globalization is inevitable and the huge economic gains it has brought in standards of living are accepted by everyone including left–leaning economists like Paul Krugman, who acknowledge its role in lifting millions of people out of poverty.² Countries like China, India and the emerging economies of Eastern Europe are being increasingly integrated as the outsourcing centres of the world for anything ranging from paper–clip production to software for an email program. Cheap Chinese wares are flooding western markets and global labour supply has effectively doubled from roughly 1.5 billion to 3 billion.³ This is having a substantial effect on prices and wages in developed economies, spurring great political and economic debate about the impacts of free trade. There is talk of how the increased competition in both goods and labour markets brought about by globalization seems to be responsible for decreasing the prices of consumer goods as well as capping wages in the industrialized world. The extra cash in the economy may then inflate asset prices instead and/or end up as foreign reserves in China.⁴

¹ Stiglitz, Joseph E. “Managing Globalization”. Presentation at Doha, Qatar. November 2005 p.1
www2.gsb.columbia.edu/faculty/jstiglitz/powerpoints/2005/Qatar_2005.ppt

² Krugman, Paul. *The Accidental Theorist*. London: Penguin Books, 1999 p.84

³ Bean, Charles. “Globalization and Inflation.” *Speech for the LSE Economics Society*, London School of Economics, 10/24/2006 p.1
<http://www.lse.ac.uk/collections/pressAndInformationOffice/newsAndEvents/archives/2006/CharlesBean.htm>

⁴ Ferguson, Niall. “Friedman is dead, monetarism is dead, but what about inflation?” *The Telegraph*. 11/19/2006

<http://www.telegraph.co.uk/opinion/main.jhtml?xml=/opinion/2006/11/19/do1904.xml>

Pirie, Madsen. “Money, Money, Money.” *Adam Smith Institute Blog*. 11/21/2006

http://www.adamsmith.org/blog/index.php/blog/individual/money_money_money/

The effects of globalization on inflation are complicated and substantial research on this topic has been lacking, producing a level of uncertainty. This paper hopes to address four key aspects of the issue: how globalization is affecting prices, wages, asset prices and the overall implications for monetary policy. While in the long-run globalization tends to have a null effect on inflation as imbalances like wage-expectations and price arbitrage are corrected,⁵ in the short-run, the impact is more uncertain. However, data indicates that inflation is going down (*Figs. 1,2 & 3*).

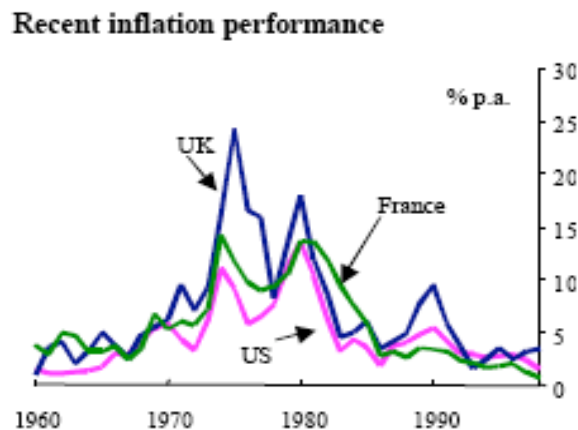


Figure 1: Inflation trends in France, UK and the US: all three show a decline over the last two decades
(*Source: Bank of England*).

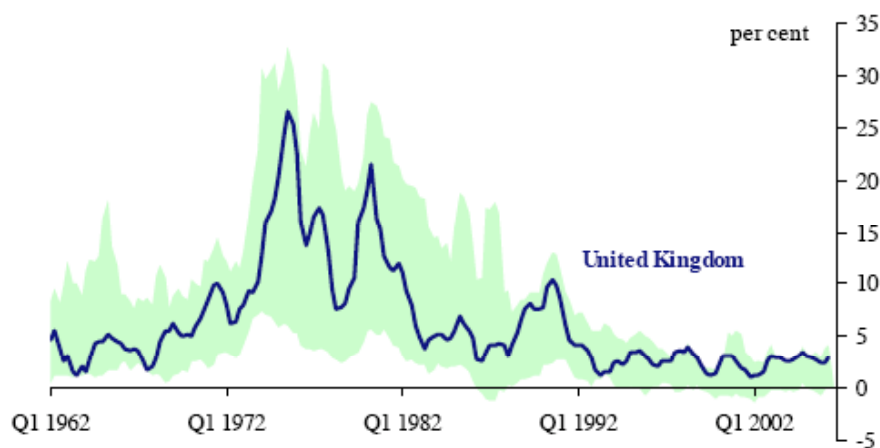
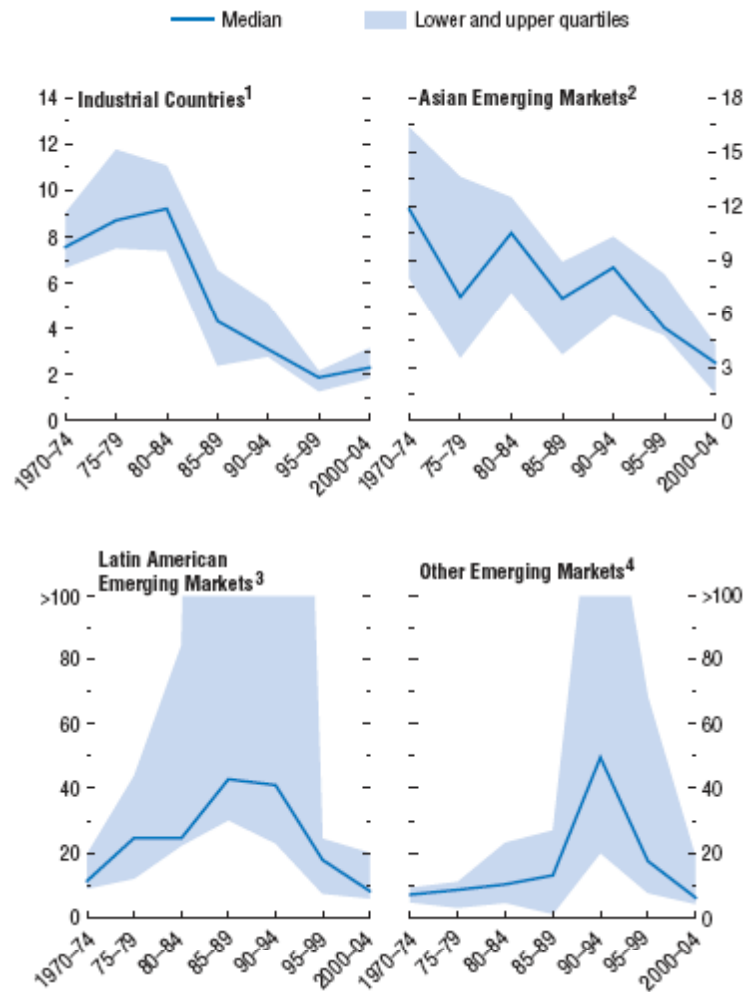


Figure 2: Inflation in the UK along with deviation in measurement by different inflation measurement standards
(*Source: Bank of England*).

⁵ Kurzman, David. "RE: Kurzman CleanTech, LP 3rd Quarter Letter." E-mail to the author. Dec. 3, 2006



Source: IMF staff calculations.

¹Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

²China, India, Indonesia, Korea, Malaysia, the Philippines, and Thailand.

³Argentina, Brazil, Chile, Colombia, Dominican Republic, Ecuador, Mexico, Peru, and Venezuela.

⁴Czech Republic, Egypt, Hungary, Poland, Romania, Russia, South Africa, and Turkey.

Figure 3: Inflation in different regions of the world: all of them show a decline at least in the past decade if not before
(Source: International Monetary Fund).

Evidence suggests that it is not predominantly globalization that is causing a stabilizing or decreasing effect on unskilled wages; rather, it is the growth of technology that is increasingly biased toward skill. Competition has caused a decrease in prices of consumer goods, but the generally low-inflation trends in the west could be due to better monetary policy in an increasingly low-inflation friendly policy environment. Higher asset-prices are the result of lower growth-volatility in the economy as investors increase their demand for investments that are expected to be less risky in the future, and not because of extra cash produced by the effects of

globalization. All these explanations suggest that globalization has a limited role in negative trends while contributing marginally to the positive trend of low inflation, thereby weakening the arguments of those who promote trade protectionism.

Inflation

The late Milton Friedman, American economist and Nobel laureate, etched his name in the history of economic thought, with his famous statement: “Inflation is always and everywhere a monetary phenomenon”. Consequently it has been generally accepted that inflation, a general increase in the prices of goods and services in an economy, is ultimately affected by the supply of money, regulated by monetary policy. He also accepted that high inflation causes great uncertainty and produces new costs in the economy, leading to instability, as well as redistributing income from lenders to borrowers, thereby discouraging saving. The biggest problem with inflation is that once it gets out of hand, it is hard and costly to bring it down.⁶ To bring inflation under control, the economy needs to run below capacity, thereby foregoing economic and employment potential, something known as the sacrifice ratio. This process of sacrificing output can be very costly. For example to bring down inflation to “manageable levels” in the US, the Federal Reserve in the 1980’s sacrificed some 20% of a year’s GDP, which was worth around a trillion dollars.⁷ This issue emphasizes the need to maintain low inflation standards. Global inflation has dropped from about 30% in the early 1990s to under 4% today, undeniably a good thing, but this trend also needs to be better understood so that a resurgence of inflation can be foreseen and prevented (*Fig. 1*).⁸

Some arguments suggest that inflation has gone down due to the liberalization of labour market institutions, but that cannot be true in and of itself because inflation has declined even in those countries where institutions have not been liberalized.⁹ Other economists have attributed the near elimination of inflation to tighter

⁶ Krugman, Paul. *The Age of Diminished Expectations*. Cambridge: MIT press, 1992 pp 53–54

⁷ *ibid.* pp. 56–57

⁸ Rogoff, Kenneth S., “Disinflation: An Unsung Benefit of Globalization.” *Finance and Development: Straight Talk*, Vol. 40, No. 4, (Dec., 2003) pp. 54–55.

<http://www.imf.org/external/pubs/ft/fandd/2003/12/pdf/straight.pdf>

⁹ Minford, Patrick. *Markets Not Stakes*. London: Orion Publishing, 1998 p.143

monetary and fiscal policy in the past two decades.¹⁰ Success of central banks cannot exclusively explain disinflation trends as even in those countries where central banks are less independent and have lower expertise, inflation levels have dropped to record levels. For example from 1990–94, annual inflation averaged over 40%, 230% and 360% in Africa, Latin America and in transition economies respectively, whereas today, inflation is in single digits in all three regions (Fig. 3).¹¹

The relation with globalization

Globalization affects different countries in different ways. High-income countries that have already moved out of manufacturing benefit from the lower prices as importers of cheaper goods, whereas countries like those in Latin American, especially Chile, Costa Rica and El Salvador, are directly endangered through competition in similar products like low-end manufactures, from China.¹² Similarly with wages, it is those countries that have a greater proportion of skilled labour rather than unskilled labour that benefit more from globalization rather than the other way round. With inflation, the effects are more ambiguous and research into how globalization affects inflation is limited. This paper deals mainly with the impacts of globalization on inflation in developed economies such as the UK and US.

Data indicates that inflation has been on the decline in the developed world (Fig. 1,2 & 3). The average annual inflation, between 1999–2004, in the US has been 2.5% while in the UK it has been 2.4%.¹³ Basic arguments suggest that as competitive pressures in both goods and labour markets increase due to trade, consumer goods become cheaper and wages stabilize. This leaves a surplus pool of money in the economy that goes on to inflate capital assets like real estate and equity markets, resulting in the boom that we witness in these sectors today. The rest supposedly goes into the foreign reserves of China, most of it in the form of dollar notes and

¹⁰ *ibid.* p.151

¹¹ Rogoff, Kenneth S., "Disinflation: An Unsung Benefit of Globalization." *Finance and Development: Straight Talk*, Vol. 40, No. 4, (Dec., 2003) pp.54–55

<http://www.imf.org/external/pubs/ft/fandd/2003/12/pdf/straight.pdf>

¹² Venables, Anthony J. and Yueh, Linda. "The China Effect." *Centre Piece* Autumn 2006 p.13

¹³ The Economist Newspaper Ltd.. *Pocket World in Figures, 2006 Edition*. London: Profile Books, 2005 pp.233–234

bonds.¹⁴ This analysis, though consistent with the laws of economics, is in need of some decoupling, as it is important to analyze different pieces of the puzzle, along with other arguments presented on the topic.

Price effects

Empirically, inflation rates have fallen to historic low levels in the developed world, while countries in the developing world, which had witnessed high levels in the past, now have declining inflation levels (Fig. 3). General opinion points to greater competition from emerging economies as the reason for low inflation, but a crucial observation is that globalization actually affects relative prices and not the absolute price level.¹⁵ Charles Bean, executive director and chief economist of the Bank of England, observes that while prices of certain goods may be driven down due to cheap imports, prices of other goods, and especially services can rise faster (Fig. 4).¹⁶

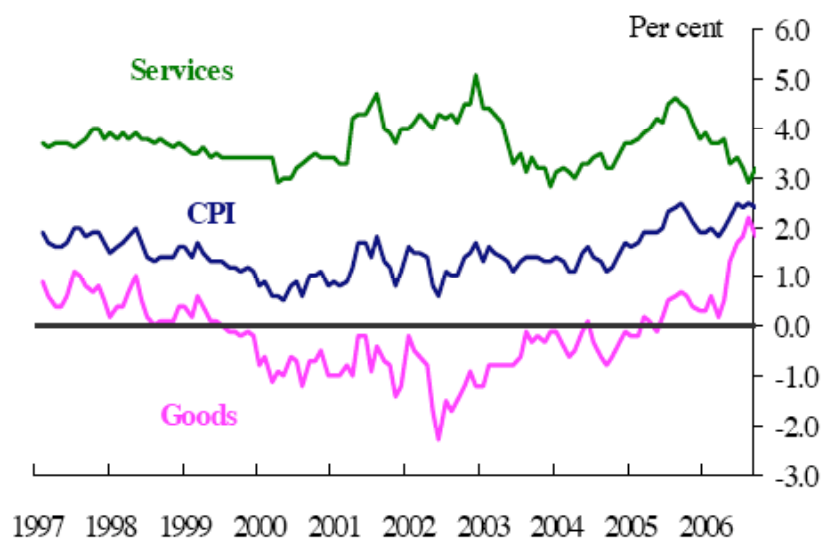


Figure 4: Goods and services inflation: While goods inflation has been low, service inflation has been high, raising net inflation (measured by the Consumer Price Index or the CPI) (Source: Bank of England).

¹⁴ Ferguson, Niall. "Friedman is dead, monetarism is dead, but what about inflation?" *The Telegraph*. 11/19/2006

<http://www.telegraph.co.uk/opinion/main.jhtml?xml=/opinion/2006/11/19/do1904.xml>

Pirie, Madsen. "Money, Money, Money." *Adam Smith Institute Blog*. 11/21/2006

http://www.adamsmith.org/blog/index.php/blog/individual/money_money_money/

¹⁵ Rogoff, Kenneth S., "Impact of Globalization on Monetary Policy." *The New Economic Geography: Symposium by the Federal Reserve Bank of Kansas City*. Aug. 24–26, 2006 p.5

www.kc.frb.org/PUBLICAT/SYMPOS/2006/pdf/rogoff.0824.pdf

¹⁶ Bean, Charles. "Globalization and Inflation." *Speech for the LSE Economics Society, London School of Economics*, 10/24/2006 p.5

<http://www.lse.ac.uk/collections/pressAndInformationOffice/newsAndEvents/archives/2006/CharlesBean.htm>

Prices of commodities, like metals, and energy behave in the same way, as there is greater demand for these goods, not only from the developed economies that are enjoying greater standards of living, but also from the new emerging economies that need raw materials for manufacturing. Some say that these secondary effects of higher prices in non-consumer goods sectors are actually more overwhelming for the overall level of prices of goods and services, such that in the end China is *exporting* inflation to other sectors of global economy.¹⁷

The inflationary impact of globalization is questionable; however basic laws of economics do suggest that inflation in the long term would remain unchanged if monetary policy maintains its course, as trade imbalances and wage-expectations due to globalization adjust in the long-run.¹⁸ In the short-run however, the picture is more complicated and it becomes harder to define the time-period, factors in consideration and consequences. Kenneth Rogoff, Professor of economics at Harvard University, believes that the trend of lower inflation can very easily reverse itself, if external factors, like the growth rates of developing countries, are affected, since the world is becoming increasingly integrated. He believes that these can act as a supply shock and actually cause high inflation similar to an oil shock.¹⁹ Thus it seems that in the increasingly integrated global economy, inflation is doing a great balancing act, trying to manage the lower prices of consumer goods, with the higher prices in other sectors like commodities, energy, equities and services. So far the balance has tilted towards the side of lower prices, but it is hard to say what the future holds.

Effect on Wages

Globalization has produced different effects on the wages of skilled and unskilled labour. As a consequence of globalization, the ratios of skilled labour and physical capital to unskilled labour have both decreased, as most of the extra labour added to the world economy is unskilled. As a result the wages of unskilled labour relative to

¹⁷ Rogoff, Kenneth S., "Impact of Globalization on Monetary Policy." *The New Economic Geography: Symposium by the Federal Reserve Bank of Kansas City*. Aug. 24–26, 2006 p.5
www.kc.frb.org/PUBLICAT/SYMPOS/2006/pdf/rogoff.0824.pdf

¹⁸ Bean, Charles. "Globalization and Inflation." *Speech for the LSE Economics Society*, London School of Economics, 10/24/2006 p.5
<http://www.lse.ac.uk/collections/pressAndInformationOffice/newsAndEvents/archives/2006/CharlesBean.htm>

¹⁹ Rogoff, Kenneth S., "Impact of Globalization on Monetary Policy." *The New Economic Geography: Symposium by the Federal Reserve Bank of Kansas City*. Aug. 24–26, 2006 p.5
www.kc.frb.org/PUBLICAT/SYMPOS/2006/pdf/rogoff.0824.pdf

skilled labour have been driven down, while the rate of profit on capital has been driven up. Unskilled labour-intensive production is outsourced to new emerging economies, whereas skilled labour industries like services gain traction in industrialized countries. This division of labour becomes increasingly pronounced with the growth of information technology and communications, and lower transport costs.²⁰ Skilled labour wage growth has empirically outpaced unskilled labour growth, which in many cases has actually declined. The decline in unskilled labour wages is increasingly blamed on the competition threat from the labour markets of China and India, and many, from Lou Dobbs viewers in the United States to the protectionists in Europe have argued for stricter trade restrictions to prevent this political atom bomb.

But there is a competing explanation for growing inequality and the falling wages of the unskilled: technology. As technology, particularly after the dot-com era, becomes increasingly important and proliferated, there is a rising premium on skill. Some like Kenneth Dam, ex-Deputy Secretary of the US Treasury, believe that “Even if there were no international trade, the demand for unskilled labour would be falling relatively”.²¹ While the relative effects of increasing trade and technology on unskilled labour wages is hard to measure empirically, Mr. Dam has suggested that technology must be a better explanation than trade given the proportionately small role of imports of manufactures from the developing world. In the US, these imports constitute only 2 percent of GNP and Jeffery Sachs, the development economist, estimated that less than 5 percent of the US labour market is directly affected by low-wage goods from Asia.²²

There is also disagreement as to whether wages are falling in the first place. Some say that wages are falling, but total compensation is actually rising due to the increasing proportion of compensation that is applied to fringe benefits.²³ Others are of the opinion that inflation is increasingly overestimated in government statistics and therefore *real* wages, i.e. wages corrected for inflation, are increasingly

²⁰ Bean, Charles. “Globalization and Inflation.” *Speech for the LSE Economics Society*, London School of Economics, 10/24/2006 p.1
<http://www.lse.ac.uk/collections/pressAndInformationOffice/newsAndEvents/archives/2006/CharlesBean.htm>

²¹ Dam, Kenneth W.. *The Rules of the Global Game*. Chicago: University of Chicago Press, 2001 p.88

²² *ibid.* p.89

²³ *ibid.* p.88

underestimated.²⁴ Even if there is a downward pressure on unskilled labour wages relative to those for skilled labour, it doesn't necessarily mean that unskilled labour of the developed world is worse off than before. Due to gains in trade and the availability of cheaper goods, the purchasing power of worker's wages may have actually risen.²⁵

A host of economists including Paul Krugman believe that the increasing bias towards technology away from unskilled workers is responsible for the problems of the labour market in the west.²⁶ Patrick Minford, Professor of Applied Economics at Cardiff Business School, believes that although low-wage competition from developing countries has produced a noticeable effect on the wages of unskilled workers, technological change has produced a similar impact. But even these impacts have been offset by other developments like productivity growth and expansion of education.²⁷ Thus overall, it can be said, that globalization doesn't produce as much of a negative effect on unskilled labour wages, which are increasingly becoming a smaller proportion of total wages in the developed world, as is generally perceived. Empirically, wages of unskilled workers have stagnated, particularly in the US, but skill-based technical change is as much responsible for this as the rise of trade with developing nations.²⁸ If indeed trade protectionists wish to be fair, they should protest the amount of free rein technological growth receives as much as they protest free trade with China. Charles Bean believes that globalization raises the equilibrium level of employment in the economy because the drop in prices of imports relative to domestic goods allows workers to enjoy higher real wages with no extra cost to employers.²⁹ Thus would be safe to say that contrary to popular opinion, globalization is actually facilitating a rise in overall wage levels by creating new jobs in various sectors and increasing productivity through competition and ease in the availability of resources.

²⁴ *ibid.* pp.88-89

²⁵ Bean, Charles. "Globalization and Inflation." *Speech for the LSE Economics Society*, London School of Economics, 10/24/2006 p.2
<http://www.lse.ac.uk/collections/pressAndInformationOffice/newsAndEvents/archives/2006/CharlesBean.htm>

²⁶ Minford, Patrick. *Markets Not Stakes*. London: Orion Publishing, 1998 p.153

²⁷ *ibid.* p.176

²⁸ Venables, Anthony J. and Yueh, Linda. "The China Effect." *Centre Piece* Autumn 2006 p.15

²⁹ Bean, Charles. "Globalization and Inflation." *Speech for the LSE Economics Society*, London School of Economics, 10/24/2006 p.5
<http://www.lse.ac.uk/collections/pressAndInformationOffice/newsAndEvents/archives/2006/CharlesBean.htm>

Asset Prices and their volatility

The high inflation and volatility of asset prices, like housing and equities, in the developed world has sparked special concern from those who wish to invest in these assets, and also from monetary policy makers who fear the inflationary trend getting out of hand. The argument presented earlier in the paper suggested the “excess cash” in the economy being channelled into assets, which is responsible for their exuberant price inflation. But there are other explanations for these trends as well, not the least of which is the decreasing amount of economic risk.

Despite the ups and downs of the global economy, it has been observed that growth volatility has been declining around the world, over the past few years. The end of the Cold war and the few large-scale military conflagrations in the past decade has provided a nice environment for this stable growth of economic output.³⁰ Kenneth Rogoff feels that:

“Continuing asset price volatility is at least in part due to heightened asset price sensitivity to risk *changes* as risk *levels* fall, and the increasing ability of financial markets to diversify risk.”³¹

He gives four reasons for high asset price volatility. Firstly reduction in short-run volatility does not necessarily mean reduction in long-run risk and equities usually reflect long horizons. Secondly, financial markets are deepening such that the riskier parts of the global economy are being exposed, which increases measures of aggregate price volatility without making the overall capital stock any more volatile than before. Thirdly, some of the volatility could be temporary as investors are still in the process of fully understanding the low-output volatility asset markets of today and they may take time to adjust. Finally, higher asset prices are fueled by lower risk *premia* like low risk adjusted interest rates, and low macroeconomic risk, such that asset prices become proportionately more sensitive to perceived levels of

³⁰ Rogoff, Kenneth S., “Impact of Globalization on Monetary Policy.” *The New Economic Geography: Symposium by the Federal Reserve Bank of Kansas City*. Aug. 24–26, 2006 p.13

www.kc.frb.org/PUBLICAT/SYMPOS/2006/pdf/rogoff.0824.pdf

³¹ *ibid.* p.1

risk.³² A capital asset pricing works in the same way: when expected future returns are discounted by a lower risk adjusted interest rate, a higher price is expected for the asset. Kenneth Rogoff presents sufficient evidence for this trend by correlating growth volatility with bond and stock market returns and performing a similar analysis with exchange rates, which tend to behave like assets.³³ Due to this he also feels that asset prices should not be given greater consideration in setting monetary policy, as they tend to be speculative and complicate the process.³⁴

To summarize, continuing asset price volatility is a trend attributable to factors such as changes in the financial industry and reduction in macroeconomic risk, which simultaneously explains the current inflationary trend of assets. Thus the role of globalization in channeling “excess cash” towards inflating assets is questionable and greater evidence would be required to prove the relation.

Implications for monetary policy

The last few sections have suggested the limited role of globalization in affecting wages, asset prices and the overall price level. The global distribution of production might not thus produce a direct effect on inflation in developed economies, but have some indirect consequences that affect how monetary policy is conducted and may as well contribute to a low-inflationary environment.

Trade-off between inflation and output

There is also evidence of a flattening of the trade-off between output and inflation since the early 90's, particularly in the UK (*Fig. 5 & 6*).³⁵

³² *ibid.* p.3

³³ *ibid.* pp.17-19

³⁴ *ibid.* p.22

³⁵ Bean, Charles. “Globalization and Inflation.” *Speech for the LSE Economics Society*, London School of Economics, 10/24/2006 p.5-6
<http://www.lse.ac.uk/collections/pressAndInformationOffice/newsAndEvents/archives/2006/CharlesBean.htm>

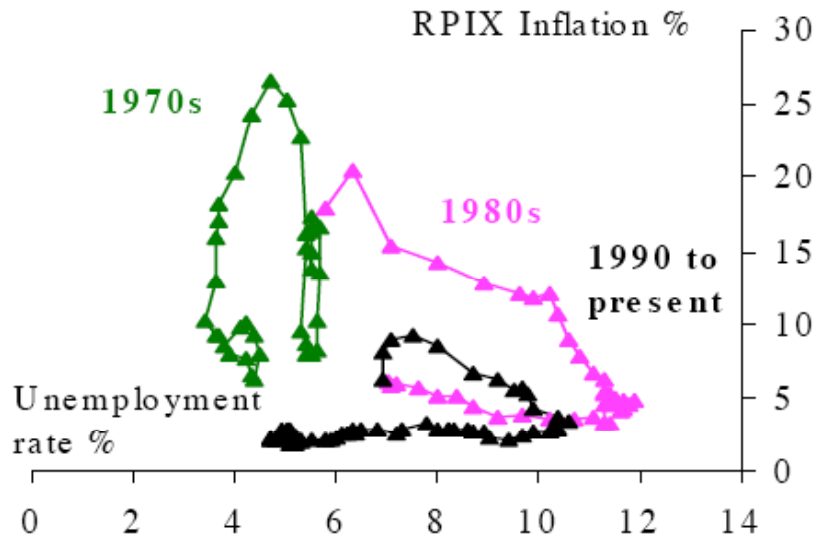


Figure 5: UK Phillips Curve

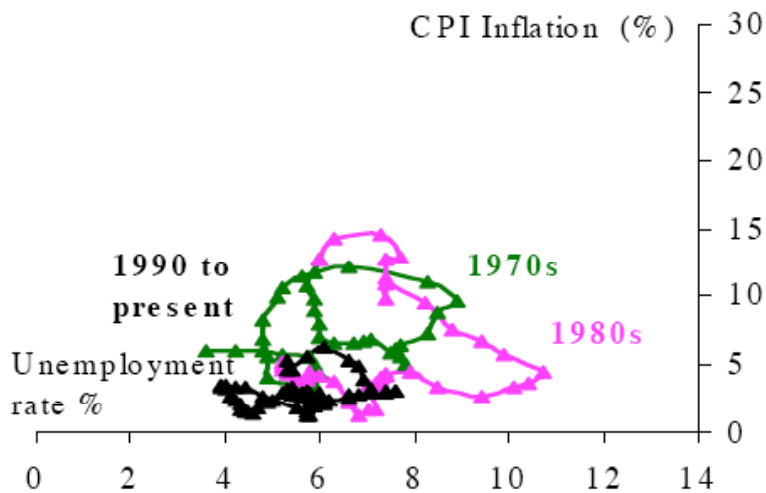


Figure 6: US Phillips Curve

There is a debate as to whether this could be due to better monetary policy or globalization itself. Mr. Bean believes that part of the explanation lies in the fact that policy–inflation expectations have been successfully kept low (*Fig. 7*), but globalization has also structurally affected the trade–off in three ways. Firstly, inflation becomes less sensitive to the domestic output gap due to trade and specialization, as witnessed by empirical evidence, and more sensitive to world demand and supply. Secondly, the cyclical nature of profits and prices is hampered as businesses become reluctant to raise prices due to increased competition. If

demand rises, the mark-up of price over marginal cost is likely to be decreased more as opposed to price increases. Lastly business cycles will affect production costs less as workers have lesser bargaining power over their wages, thereby stabilizing the marginal cost of labour. If immigration and labour mobility is added into the equation, there is additional stimulus to weaken the link between activity and cost of labour.³⁶ All these factors, in combination, work to flatten the trade-off between inflation and domestic output.



Figure 7: Inflation expectations in the UK since 1995: trend shows that expectations have declined and then more or less stabilized, indicating that people do not expect inflation to get out of hand in the near future, which could be up to 10 years (Source: Bank of England).

Despite this influence though, there is one consequence that works against these three factors, which is that businesses will adjust prices more frequently as competitive pressures will create greater costs to having an incorrect price level.³⁷ This trend is evident as businesses that are in more competitive markets, like retail, tend to have more frequent price adjustments (Fig. 6). Mr. Bean does not discredit the importance of monetary policy in bringing down inflation, as opposed to globalization, but diplomatically states that, “both factors are likely to be at work”. He also adds “there are cross-country empirical studies that suggest that it [the trade-off] is indeed flatter in more open economies”.³⁸

³⁶ *ibid.* pp.6-7

³⁷ *ibid.* p.7

³⁸ *ibid.* p.8

Kenneth Rogoff on the other hand feels that globalization steepens the Phillips Curve relationship, but still favours a low inflation environment, as commitments to low inflation are more credible and durable. As competition improves price and wage flexibility, the output gains from expansionary monetary policy are reduced.³⁹ Also since the Phillips Curve relationship is steepened, the gap between natural rate of output and efficient rate of output is reduced such that it is politically easier to maintain low inflation and Professor Rogoff believes that this effect dominates over the long run.⁴⁰ Mr. Bean ardently disagrees instead stressing a response, that increased specialization due to globalization reduces the response of inflation to the domestic output gap, making it more sensitive to the world output gap.⁴¹ Also as increased competition in both goods and labour markets reduces the scope of businesses to raise prices and workers to bargain for higher wages, the Phillips Curve becomes flatter. The data, although harder to read, supports Mr. Bean's argument in this case as the flattening of the curve is observed in certain industrialised countries along with a relation between increased openness and decline in inflation (Fig. 5 & 6).⁴²

Capital

Capital integration globalization facilitates greater competition for mobile capital between regions and countries, as demand and return from investments go up. This has direct and indirect consequences on inflation. Directly, the more open the economy is, the smaller the real benefits of surprise monetary expansions. Surprise monetary expansions, something that causes a surge in inflation, are a tool of central banks to boost output in the short-run, for example to rescue an economy from a recession. But if they become a less effective tool for improving output, the equilibrium rate of inflation is lowered.⁴³ Indirectly, high inflation is an undesirable locational factor in the world of mobile capital and investment, a sign of bad policy

³⁹ Rogoff, Kenneth S., "Impact of Globalization on Monetary Policy." *The New Economic Geography: Symposium by the Federal Reserve Bank of Kansas City*. Aug. 24–26, 2006 p.6
www.kc.frb.org/PUBLICAT/SYMPOS/2006/pdf/rogoff.0824.pdf

⁴⁰ *ibid.* p.7

⁴¹ Bean, Charles. Comments on Ken Rogoff's speech *The New Economic Geography: Symposium by the Federal Reserve Bank of Kansas City*. Aug. 24–26, 2006
<http://www.kc.frb.org/PUBLICAT/SYMPOS/2006/PDF/Bean.paper.0904.pdf>

⁴² *ibid.* p.2

⁴³ Wagner, Helmut. "Implications of Globalization for Monetary Policy." Vienna: SUERF, 2002
<http://worldcatlibraries.org/wcpa/oclc/48657600> p.14

and thus a disadvantage.⁴⁴ This would mean that with more financial integration, politicians will attach a greater value to controlling inflation for political reasons, as the negative perception of inflation could lead to economic instability and capital drain for that country or region. Also, fiscal and monetary policy can work more together as the output–boosting effect of inflationary policies is reduced, such that there is increased cooperation between policy–makers and central banks, making it easier for the latter to control inflation.⁴⁵

According to Helmut Wagner, Professor of Economics at the University of Hagen, globalization, on the macroeconomic level, leads to greater competition for capital and infrastructural investment between countries, thereby forcing government to become more efficient.⁴⁶ Mr. Wagner gives four main reasons for how globalization could affect inflation: generally a higher aversion to inflation due to threat of capital drain, a lower preferred inflation rate, extra costs to central banks to control inflation and extra costs to society.⁴⁷ The threat of capital drain has already been mentioned above and the lower preferred inflation rate point is related to that aspect as economies get increasingly integrated. Subsequently central banks, and thereby society, lose control over monetary issues as capital is free to move across geographical boundaries, and restrictions are few. This might produce some extra costs in the economy that influence inflation and inflationary expectations. Overall, Mr. Wagner feels that globalization leads to an increase in reforms and fiscal policy becomes more disciplined such that inflation will go down.⁴⁸ While globalization might not directly reduce inflation, it reduces the inflation bias and improves the conditions for price stability policy by central banks, as there is greater locational competition for mobile capital.⁴⁹

⁴⁴ *ibid.* p.15

⁴⁵ *ibid.* p.17

⁴⁶ *ibid.* p.11

⁴⁷ *ibid.* p.17

⁴⁸ *ibid.* p.29

⁴⁹ *ibid.* p.30

Business Operations and Monetary Policy

Pay growth in the UK has been fairly stable (Fig. 8), while the rate of growth of purchasing power of wages has slowed and the real wage in terms of price of UK output has been more or less in trend with productivity growth (Fig. 9).



Figure 8: Regular pay growth in the UK has declined over the past few years
(Source: Bank of England)

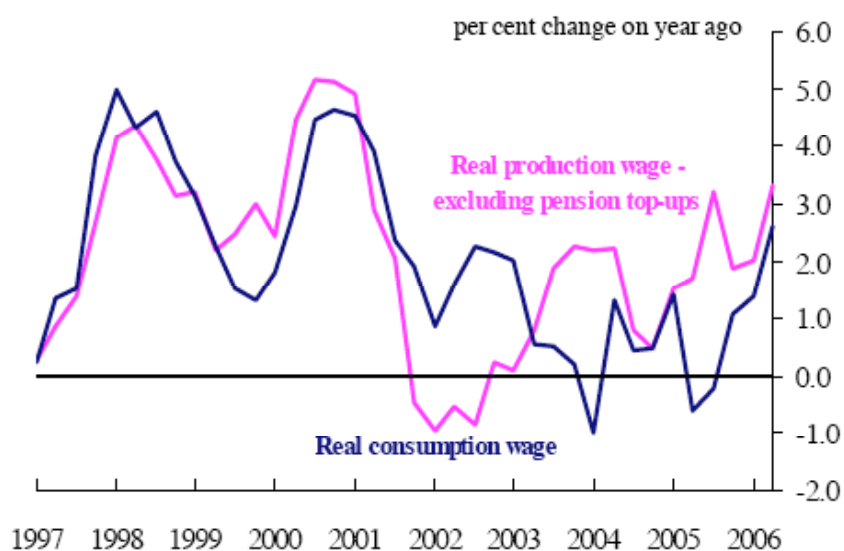


Figure 9: Real production wage has been in trend with the real consumption wage over the past few years, indicating the wages have followed productivity patterns.
(Source: Bank of England)

Thus wages have not been the major worry for businesses, but instead energy prices have caused more of a dilemma (*Fig. 10*).

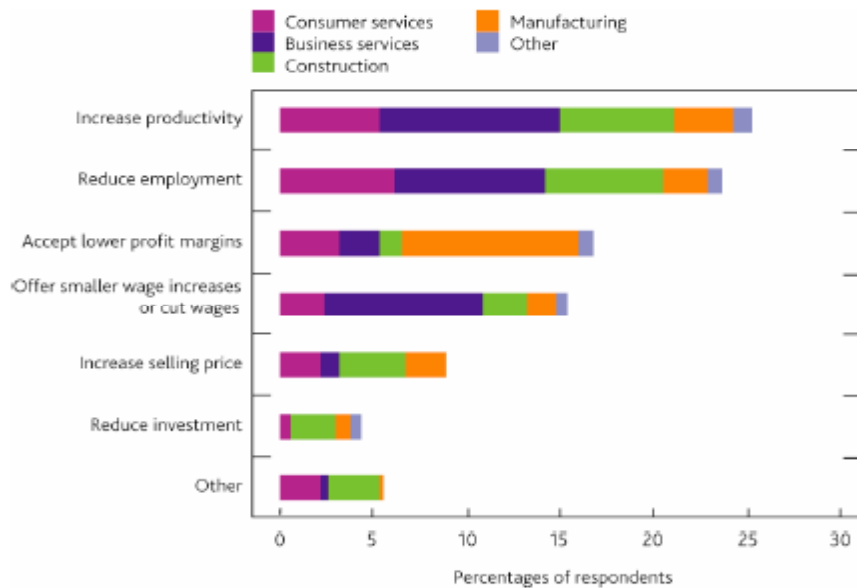


Figure 10: The most common response by business to lower profit margins is to increase productivity or reduce employment, thereby highlighting the increased competitive nature of conducting business in the integrated world (*Source: Bank of England*).

The more competitive atmosphere has meant that businesses cannot pass off higher costs of energy in higher prices, and instead have to lower other costs like wage increases, prices of immediate inputs, or by simply (easier to characterize than to put into actual practice), improving efficiency. Figure 11 shows the results of a survey conducted by the Bank of England that corroborates this trend, especially in manufacturing, a sector most exposed to international competition (*Fig. 11*).

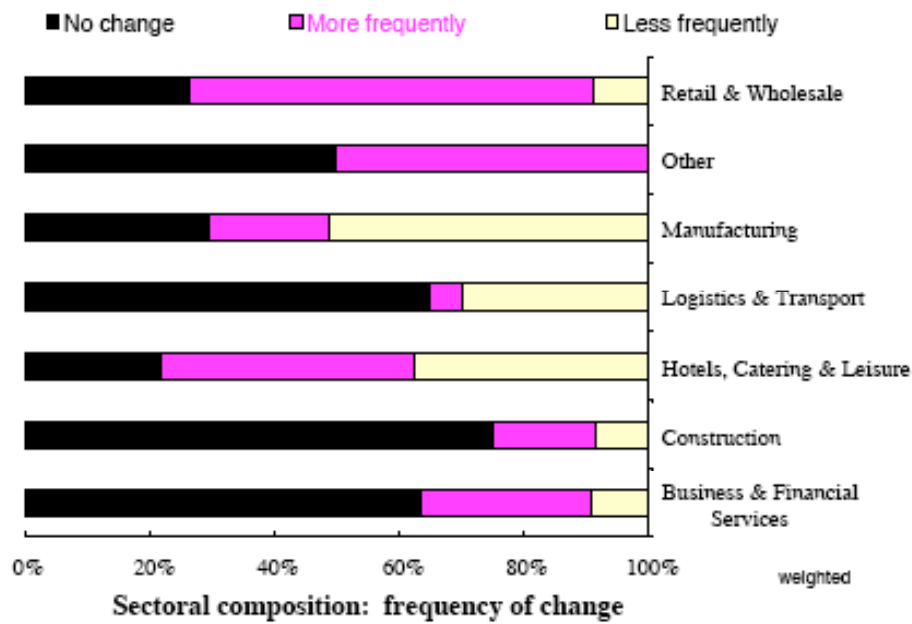


Figure 11: Frequency of price changes: Businesses in those sectors exposed to more competition such as retail, entertainment and manufacturing, tend to change their prices more frequently (*Source: Bank of England*).

This would mean that the effect of rising energy prices would be cushioned into inflation figures, but it could also mean that falling energy prices would not improve inflation numbers as much, since businesses would want to rebuild profits and workers, their wages (*Fig. 12*).⁵⁰

⁵⁰ Bean, Charles. "Globalization and Inflation." *Slides of the speech for the LSE Economics Society*, London School of Economics, 10/24/2006
<http://www.lse.ac.uk/collections/pressAndInformationOffice/newsAndEvents/archives/2006/CharlesBean.htm>

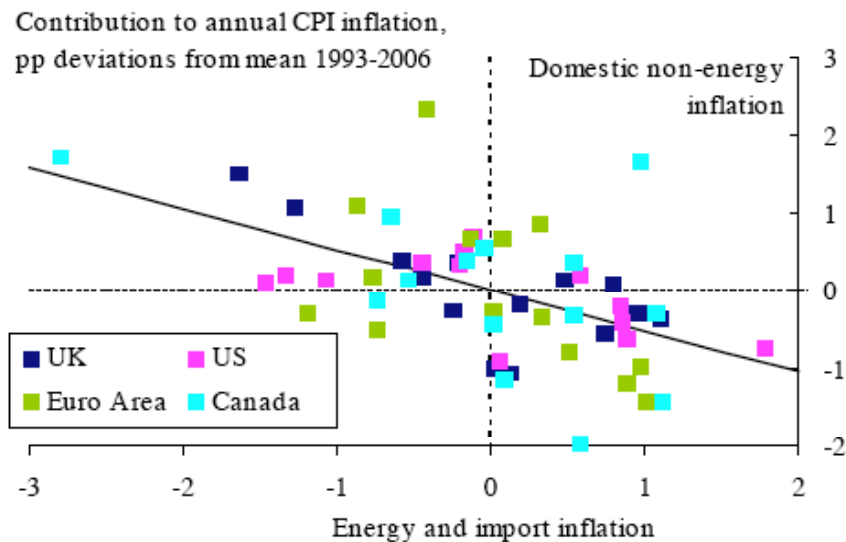


Figure 12: The trend between domestic non–energy inflation and energy and import inflation (contributions to CPI), is slightly negative. This indicates the lack of much contribution of energy prices to inflation numbers (Source: Bank of England).

These effects have two implications for monetary policy: firstly, changes in demand or policy would not deviate target inflation as much since businesses will not change prices as much, but also changing aggregate demand would become a less effective tool to control inflation since businesses would be more responsive to competitive pressures. Thus if inflation deviates from target, the medicine to bring it down would be more bitter and the economy would require a longer slowdown, as central banks would have to forego greater economic employment potential. This type of greater–stakes dilemma produces a greater premium on keeping inflation on target.⁵¹

Another impact on monetary policy has come from the decline in real output volatility in the economy as it has made it easier for central banks to control and predict macroeconomic changes and carry out policy accordingly. Deeper financial markets have contributed to this decline in real output volatility, but there is still debate as to whether it is globalization that has assisted it.⁵² Overall though, globalization has provided a more conducive environment to conduct monetary

⁵¹ Bean, Charles. "Globalization and Inflation." *Speech for the LSE Economics Society*, London School of Economics, 10/24/2006 <http://www.lse.ac.uk/collections/pressAndInformationOffice/newsAndEvents/archives/2006/CharlesBean.htm>

⁵² Rogoff, Kenneth S., "Impact of Globalization on Monetary Policy." *The New Economic Geography: Symposium by the Federal Reserve Bank of Kansas City*. Aug. 24–26, 2006 p.20 www.kc.frb.org/PUBLICAT/SYMPOS/2006/pdf/rogoff.0824.pdf

policy by improving productivity, competitiveness and flexibility in the global economy, and central banks too have enjoyed success over the past few years, becoming more independent and efficient.

Conclusion

Globalization has affected inflation in subtle ways especially if a host of other factors are considered. In the long run, the seemingly dis-inflationary effect of globalization is going to be nullified as imbalances created by trade and expectations are corrected over the long term. In the short-run, the analysis is more complicated. Prices of consumer goods have plummeted due to the “China-effect” whereas other prices such as commodities, energy and services have increased such that the overall affect of globalization on general prices might be mitigated. Not all wages have gone down due to globalization—skilled wages have gone up as productivity has risen and new jobs have been created. Unskilled wages have either gone down marginally or stabilized, but that has probably got to do more with the increasingly discriminatory nature of technology in favor of skills, rather than off-shoring of jobs. Asset prices have risen and become more volatile due to reasons like financial integration and lesser-perceived future risk of growth volatility, and not because of the role of globalization. Some steps to prevent an over-inflation of assets could be to improve central bank communications in order to promote financial development and growth.⁵³ Therefore in the analysis of general prices, wages and asset prices, globalization doesn’t seem to have a significant direct impact. According to Patrick Minford, it is the understanding of the bad trade-off of inflation, better monetary policy and greater independence of central banks, as in the UK, that has calmed inflation growth⁵⁴. To summarize in the words of Charles Bean:

⁵³ Rogoff, Kenneth S., “Impact of Globalization on Monetary Policy.” *The New Economic Geography: Symposium by the Federal Reserve Bank of Kansas City*. Aug. 24–26, 2006 p.26

www.kc.frb.org/PUBLICAT/SYMPOS/2006/pdf/rogoff.0824.pdf

⁵⁴ Minford, Patrick. *Markets Not Stakes*. London: Orion Publishing, 1998 p.152

“While globalization is not the ultimate cause of the generally low and stable inflation experienced by most industrialized economies over the past fifteen years, the associated improvement in the industrialized countries terms of trade has provided a benign backdrop in the widespread pursuit of low inflation through stability-oriented monetary policies.”⁵⁵

Globalization poses certain implications for monetary policy. First of all, as the world becomes more financially integrated, there is greater competition for capital and thus policy makers have more incentive to keep inflation at low values. Therefore it may become easier to carry out monetary policy. While the effect of globalization is not simply direct as has been suggested earlier, it does indirectly affect inflation, most notably by producing a more conducive environment for carrying out a low-inflationary policy. The pitfall, though, is that the costs of keeping inflation within target have also risen since the economy now requires a greater slowdown to forego the same amount of inflation than it would have in previous decades. Also globalization doesn't necessarily prevent a resurgence of inflation.⁵⁶ On the contrary, expansionary monetary policy has more, not less of an effect on inflation in a country with a large import share and a floating exchange rate than it does in a relatively self-sufficient economy.⁵⁷ Therefore it is important that central banks remain vigilant and realistic of the inflationary threat, without discouraging free trade.

⁵⁵ Bean, Charles. “Globalization and Inflation.” *Speech for the LSE Economics Society*, London School of Economics, 10/24/2006 p.10
<http://www.lse.ac.uk/collections/pressAndInformationOffice/newsAndEvents/archives/2006/CharlesBean.htm>

⁵⁶ Krugman, Paul. *The Accidental Theorist*. London: Penguin Books, 1999 p.111

⁵⁷ *ibid.* p.112

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