

Arndt, Sven W.

**Working Paper**

## Macroeconomic policy and trade problems

Diskussionsbeiträge, No. 119

**Provided in Cooperation with:**

Department of Economics, University of Konstanz

*Suggested Citation:* Arndt, Sven W. (1978) : Macroeconomic policy and trade problems, Diskussionsbeiträge, No. 119, Universität Konstanz, Fachbereich Wirtschaftswissenschaft und Statistik, Konstanz

This Version is available at:

<https://hdl.handle.net/10419/78210>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

FACHBEREICH  
WIRTSCHAFTSWISSENSCHAFT UND STATISTIK  
UNIVERSITÄT KONSTANZ

Macroeconomic Policy and  
Trade Problems

Sven W. Arndt

Nr. 119

DISKUSSIONSBEITRÄGE

D-7750 Konstanz  
Postfach 7733

Macroeconomic Policy and  
Trade Problems

Sven W. Arndt

Nr. 119

Erscheint in:

Forthcoming in:

Problems in International Economics. A.L. Chickering (ed.),  
Institute for Contemporary Studies.

Dezember 1978

Diskussionsbeiträge des Fachbereichs  
Wirtschaftswissenschaft und Statistik  
der Universität Konstanz

A 9 914 79  
Weltwirtschaft  
Kiel

MACROECONOMIC POLICY AND TRADE PROBLEMS

by Sven W. Arndt <sup>+)</sup>

I. Introduction

In the postwar era international monetary arrangements were based on fixed but adjustable exchange rates. During the same period, the thrust of international commercial relations pointed toward free trade and open competition. In the early 1970s the international monetary order collapsed as the major trading nations switched to floating rates, and the system of free trade and specialization fell under the mounting threat of a rapidly rising protectionist sentiment and of increasingly open anti-competitive intervention by governments and international institutions. All this has, of course, been accompanied by talk of an emerging new international economic order.

The old order during which world trade and product grew at unprecedented rates appears to have lost its appeal; it is as yet not clear where the search for a new order shall take the international community. What is clear, however, is that perceptions and attitudes have changed dramatically. The old order was animated by a sense of interdependence and common purpose; by the belief that the diverse and not always reconcilable aims and aspirations of nations would be best though not perfectly served by international cooperation in an environment of free trade and open competition. The new spirit, on the other hand, is inward-looking and chauvinistic; afraid of economic change and opposed to competition; uncooperative, impatient and bent on denying the relevance of experience.

---

<sup>+)</sup> The author is Professor of Economics at the University of California, Santa Cruz, and Visiting Professor of Economics at the University of Konstanz, West Germany

A fixed exchange rate regime is viable only so long as member nations play by the rules and conduct compatible macroeconomic policies. A free trade regime is viable only so long as members play by its rules and assign to competitive forces a dominant role in the allocation of world resources. Membership in any system imposes responsibilities and constraints along with the benefits it bestows. When nations come to feel that the costs of membership exceed the rewards, it becomes rational policy for them to seek more fruitful alternatives. That is to some extent what happened to the postwar exchange regime, as countries increasingly refused to accept the restraints it imposed on their freedom to conduct independent macroeconomic policies. And it is also the active ingredient impelling nations toward the new protectionism; in this case it is unwillingness to face the competition from more productive and efficient foreign producers.

Having found the old order wanting, members are embarked on an effort to build a better one. That is as it should be, if it werent for a dark and dangerous undercurrent giving impetus to the dissolution of the old order. There surely has occurred a loss of common purpose, but is there not also more - a willful denial of the positive and nurturing role of international community. A belief that "dropping out" and withdrawal behind floating rates and protectionist barriers brings costless liberation from irksome international obligations. Consider the new protectionism, which proceeds against all accumulated experience on the assumption that it can serve the special interests without inflicting serious harm to the public interest and without tearing the delicate web of international civility. And consider the expansionist binges upon which a number of nations embarked in the belief that floating rates had made them free. The euphoria over this liberation from responsibility was fleeting, indeed, as reckless domestic policies led to rampant inflation and runaway

currency depreciation. The bittersweet aftertaste has found expression in the swelling call for a return to the "discipline" of fixed exchange rates.

There is nothing inherent in fixed exchange rates that would make them a "better" system. Nor do they provide inherently more discipline. Unless certain conditions are satisfied, they will not work at all. These conditions include, as we shall see, coordination of the macroeconomic policies of member countries.

## II. The Channels of Transmission

Countries depend upon each other because their citizens are specialized. Specialization necessitates trade and trade takes place in markets. Markets in turn are interconnected because to a greater or lesser extent every commodity, asset and factor of production in the world is related to others as a substitute or complement. Anything which disturbs the market for one of these, generates repercussions in all the others, the strength of each repercussion depending on the degree of substitutability or complementarity.

As countries have pursued the rewards of international specialization and trade, they have established a complex network of market linkages. These arrangements facilitate mutually beneficial exchange, but they also increase a country's exposure to shocks and disturbances originating abroad. Rational economic policy will hence not push linkages beyond the point at which costs and benefits are in rough balance, for at that point the gains from specialization and trade will have been fully exploited.

### Monetary Policy: Transmission of a Disturbance

In an interdependent world, economic disturbances are broadcast beyond the borders of the country of origin. Like ripples on a pond, price, income and wealth effects are spread

around the globe. They are felt most strongly in countries and markets with the closest links to the point of origin. Let us examine the transmission process by considering the repercussions of a monetary expansion in the United States.

When the Federal Reserve increases the money supply, the immediate effect is a decline in interest rates and in the cost of credit. Lower interest rates, however, reduce the relative attractiveness of dollar-denominated assets and encourage investors to shift the composition of their portfolios toward foreign assets. A capital outflow materializes. Whether this attempted stock-shift succeeds depends, as we shall see below, on the nature of the exchange regime. To the extent that it succeeds, the flow of funds must ease credit conditions and thus lower interest rates abroad. Hence, the liquidity-raising, interest rate-reducing effect of the domestic monetary expansion has been transmitted to the rest of the world via linkages among financial markets. The strength of the transmission rises with the size of the domestic and the openness of the foreign financial sector.

These portfolio adjustments tend to take place comparatively swiftly in response to changes in relative rates of return. Then, as the expansionary policy raises output, incomes and prices at home, a new round of adjustments is set in motion. An increase in income increases saving, which in turn increases wealth. Normally, a rise in wealth increases the demand for all assets including those denominated in foreign currencies. To the earlier stock demand for foreign assets we must now add the wealth-induced flow demand. In combination and in the absence of offsetting forces, these demand changes exert upward pressure on foreign asset prices and downward pressure on foreign interest rates. Along the financial channel, therefore, transmission takes place by means of the adjustments triggered by relative price and income-wealth changes.

A second transmission channel operates through linkages among commodity markets and is manifest in variations in the balance of trade. When the monetary expansion increases income and employment, the demand for imports rises, the proportion of the income increment which is devoted to imports being determined by the marginal propensity to import. When Americans spend more on foreign goods they boost foreign production and employment, provided that excess capacity exists abroad. Otherwise, the demand expansion raises prices abroad. This explains why countries suffering from unemployment will welcome the American stimulus, while those with little spare capacity will deplore it for its inflationary consequences.

From the American point of view, a successful monetary expansion is one which boosts employment and output while maintaining a stable price level. In that event, the spillover into imports is determined exclusively by income effects. If, on the other hand, the domestic price level does rise, the spillover includes a relative-price effect which encourages domestic and foreign users to switch from American to foreign products. Again, where foreign activity is stagnant the spillover will be welcome; where it is not, the United States will be accused of exporting inflation.

A third channel of transmission, but one which we shall not consider in detail, operates through linkages among labor markets. A rise in relative wages and salaries in one country creates incentives for the international migration of labor. As a result the supply of labor declines in low-wage and rises in high-wage countries and the divergence among wage rates is reduced. On the whole, countries have installed elaborate and effective constraints on the movement of workers, although the migrations of Mexican workers to the United States and of southern European workers to the north represent important exceptions.



In each case, the transmission tends to reduce divergences among countries' economic conditions. The more extensive are a country's connections to its trading partners and the linkages of its markets to those abroad, the greater will be the influence of external events on interest rates, prices and wages and on output and employment at home. If the influences emanating from abroad are consistent with domestic objectives, they will be welcome; if they are not, the country will seek to insulate the home economy. As we shall see, flexible exchange rates offer a partial means of insulation.

To illustrate the importance of transmission, consider a dispute which arose in the early days of the Carter Administration. Using the analogy of a locomotive pulling a train, American officials urged Germany and Japan to stimulate their economies in order not only to improve their own output-employment picture but through the spillover effects described above to help pull the western world out of a general economic slump. American officials felt that spare capacity was ample in the two countries, implying that expansionary policies would lead mainly to output and employment increases and not to inflation. The Germans and Japanese disagreed strongly, arguing that their economies were operating much closer to full capacity than American officials realized. In their view, the suggested policy initiatives would lead primarily to inflation at home. Confronted with the choice between boosting employment and incomes abroad and maintaining price stability at home, both governments elected the latter.

#### The Role of Exchange Rates

We have seen how changes in relative prices and incomes in one country are telegraphed around the world. In tracing the effects of a monetary expansion, however, we have ignored

exchange rates. Inasmuch as variations in exchange rates may enhance or destroy the attractiveness of foreign assets and commodities, they play a critical role in the transmission of disturbances.

Whether a foreign asset represents a worthy investment depends on its relative yield, as we have seen. But since it is the yield expressed in the investor's home currency which matters, the cost of moving into and out of foreign exchange must enter into the profit calculation. If the exchange rate on the day the investment is repatriated is identical to today's rate, the yield is given by the foreign rate of interest. If it is higher, the yield is greater than the foreign rate of interest. Since, however, the future exchange rate is not known to the investor at the time he makes his decision, he must form an expectation about the future movement of exchange rates. If he expects the exchange rate to rise, the appeal of the foreign asset is enhanced: the expected depreciation of the home currency raises the expected yield of the foreign asset.

Since these expectations are formed in an uncertain world, the yield which is ultimately realized may be quite different. By establishing an open position in foreign exchange, the speculator takes a deliberate risk. Not every investor, however, is prepared to accept the exposure of an open position; many will seek to protect themselves by using the hedging opportunities provided through the forward exchange market. In that market, in which currencies are traded for future delivery, the investor promises to deliver the proceeds of his foreign investment at a specified future date for a specified price. That price is the forward rate of exchange which, being known to him now, enables him to calculate the foreign yield exactly. The investor has covered himself by selling foreign exchange forward. The advantage of covered interest arbitrage over the uncovered arbitrage undertaken by the speculator is, of course, that

it eliminates the risk inherent in unanticipated movements in exchange rates.

The rate of return on the foreign asset thus depends on the foreign interest rate and on the difference between spot and forward exchange rates. If the two exchange rates are identical, a simple comparison of home and foreign interest rates will suffice. Otherwise, the rate of return, expressed in the investor's home currency, rises as the forward rate rises relative to the spot rate. Hence it is possible for a foreign asset carrying a lower rate of interest to represent the preferred investment, provided that the excess (in percent) of the forward over the spot rate more than offsets the excess of the home over the foreign interest rate.

When exchange markets are efficient and participants - especially banks and foreign exchange brokers - are alert to profit opportunities, they will arbitrage funds among countries until interest rates and spot and forward exchange rates have reached levels equalizing returns on assets. In practical terms, any differences which remain will then be due to differences in the inherent riskiness of assets, with the more risky asset having to pay a higher rate of return. During the arbitrage process interest rates and exchange rates will be changing until all opportunities for the profitable transfer of funds have disappeared and a condition known as interest rate parity obtains.

Thus, when the monetary expansion reduces interest rates in the United States it creates incentives for outward interest arbitrage. As investors move to shift funds into foreign assets, they bid up the spot prices of foreign currencies and, through their covering operations, they bid up the forward price of the dollar. The dollar depreciates spot and appreciates forward and together with appropriate

adjustments in interest rates the system re-establishes interest parity. When exchange rates are flexible and exchange markets are sensitive to changes in demand and supply, exchange rates will be quick to adjust and thereby to eliminate incentives for further arbitrage. When exchange rates are fixed, interest parity can be established only by changes in the two rates of interest, with the home rate rising and the foreign rate falling. To the extent that a system of fixed exchange rates places a greater burden on adjustments in the foreign rate of interest, to that extent will the credit-easing effects of the American monetary policy be transmitted more fully to other economies.

Floating rates thus tend to mute the force of transmission along the financial channel. They also mute transmission along the commodity channel, for when the expansionary monetary policy raises the demand for imports, it raises the demand for foreign exchange. In the absence of countervailing pressures, this tends to push up the price of foreign exchange and thereby reduces the attractiveness of imports. Thus, the spillover created by the domestic expansion is turned back by the depreciation of the home currency. The depreciating currency bottles up the expansionary pressures and as a result their impact on domestic income and employment is enhanced, but so also is the inflationary potential of an inappropriate or excessively expansionary policy. This has been a lesson which several countries have had to learn the hard way since the introduction of floating exchange rates in 1973.

#### Fixed Exchange Rates

The governments or central banks of two countries may fix the exchange rate between their monies by promising to buy and sell them at the agreed rate of exchange. So long as

private demand and supply in the foreign exchange markets are in balance at this rate, no actual intervention is required. On the other hand, when an excess demand or supply threatens to push the exchange rate away from its targeted level, central bank sales of the vurrency in excess supply will have to take place.

When the expansionary monetary policy creates an excess demand for foreign exchange, the central bank must supply the extra exchange demanded in order to prevent the domestic currency from depreciating. In supplying foreign exchange, however, it withdraws domestic money from private circulation. Thus, while the monetary expansion itself increases the domestic money supply, the exchange market intervention reduces it. Consequently, the private sector's excess demand for foreign exchange (and excess supply of the domestic currency) will vanish when the central bank through its exchange market intervention has withdrawn enough domestic money from private hands to re-establish a proper balance between actual and desired cash balances.

The phenomen just described implies that imbalance in the foreign exchange market created by monetary disturbances are temporary and self-correcting, provided that the central bank refrains from neutralizing these automatic adjustments by continually issuing new money.

Exchange market intervention by the central bank withdraws dollars from private circulation, but it also injects foreign monies into private circulation. Thus, under fixed exchange rates monetary expansion in one country leads through the exchange rate-fixing intervention of the central banks to money creation in partner countries. Money creation is thus transmitted, and unless partner countries are able to neutralize these tendencies, they will lose effective control over their own money supplies.

Loss of control over monetary policy was one of the issues which led to the demise of the postwar fixed exchange rate regime. Deficit countries found that money balances were draining away through the mechanism of the central banks' exchange market intervention, thus depriving them of effective control over the domestic money supply. Surplus countries, on their part, found themselves forced to accept money supply growth rates which were incompatible with domestic macroeconomic stability. And neither side was willing to undertake timely adjustments in the targeted levels of their exchange rates in order to eliminate imbalances in exchange markets.

In other words, countries insisted on fixing their exchange rates, but then refused to conduct domestic policies which were compatible with those rates. The disagreement stemmed from differences in national economic objectives and in inflation tolerances. In order to maintain established exchange rates, surplus countries would have to accept higher inflation rates or deficit countries reduce theirs. In the absence of a convergence of inflation tolerances and of effective coordination of macroeconomic policies, exchange rates could not for long be kept at their targeted levels. The switch to floating rates in early 1973 was undertaken in an effort to regain control over national money supplies and inflation rates. It was an inevitable event in a world in which the economic goals and objectives of member nations had become incompatible.

#### Real Disturbances

Flexibility in exchange rates thus shelters a country from external monetary disturbances by mitigating the force of transmission. The country is freed from the need to defend a given exchange rate and consequently enjoys greater

policy autonomy. There is in general, however, neither automatic nor complete insulation against foreign disturbances, only the availability of an additional policy instrument, namely monetary policy, with which domestic objectives may be pursued.

Critics of floating rates sometimes complain that the system is ineffective as an insulator against real disturbances. But that is exactly as it should be. If the world's scarce resources are to be allocated efficiently, if the benefits of specialization and trade are to be exploited to the fullest and if economic development is to come to the world's poorer nations, real changes must be allowed to occur and their effects transmitted.

To be sure, real phenomena such as shifts in comparative advantage and changes in competitiveness are bound to impose economic hardships on the industries and individuals affected. In a just and compassionate society efforts will be forthcoming to spread the burden of adjustment and to ease its cost. Enlightened public policy will be sensitive to the special interests without losing sight of the public interest. The essential flaw in anti-competitive manipulation of exchange rates and in protectionism is that they are inimical to the public interest.

### III. Conclusion

A floating exchange rate keeps domestic monetary disturbances in and foreign ones out. Whether floating rates are desirable is hence to some extent a question of whether destabilizing monetary shocks originate mainly at home or abroad. Floating rates will be preferred by countries whose domestic economies are more stable than the world around them, because floating rates provide protection against destabilizing monetary in-

fluences from abroad. Countries with low inflation tolerances will defend themselves against having to import the higher inflation of their inflation-prone neighbors by adopting flexible exchange rates.

Since a floating rate forces a country to swallow whole the instability it creates, closing off all avenues for the exportation of domestic instability, a country which is unable to conduct steady macroeconomic policies may prefer to fix its exchange rate, thus maintaining a safety valve for releasing excessively inflationary or deflationary pressures. Such a policy represents a means of importing the relative stability of the surrounding world. To derive maximum benefit from this policy, however, the country cannot be too large in relation to the rest of the world. A very large country so dominates the world that domestic instability generates global instability.

In a world in which countries generate different inflation rates, the high-inflation country's currency must depreciate and the low-inflation country's currency appreciate. These exchange rate adjustments are necessary to compensate for inflation-created divergences in national price levels. Unless countries are able to agree on common inflation rates and to maintain macroeconomic policies consistent with those rates, exchange rates will need to be continually adjusted. Under such conditions, flexibility in exchange rates is absolutely essential. Countries wishing to fix their exchange rates must first find ways to coordinate their macroeconomic policies. In today's world that is a most difficult task.

The basic problem lies with control over the money supply and interest rates. In many countries governments have been unable to reconcile conflicting domestic claims and



objectives. In choosing flexible rates, countries hoped to gain greater autonomy in matters relating to monetary and fiscal policies. Many, however, confused autonomy with freedom to do anything they pleased. They created money faster than their economies could use it. The result was rampant inflation which a depreciating exchange rate prevented them from exporting. Though governments tried to blame the inflation on the depreciating exchange rate, the major cause of both was excessive monetary expansion. Countries had become the victims of their own reckless policies.

A well-functioning exchange rate regime should permit the transmission of real phenomena, for only then can nations exploit fully the gains from specialization and exchange. Anti-competitive intervention designed to extract special benefits for one country constitute beggar-my-neighbor acts. It is as inimical to the public and international interest as are the more conventional forms of protectionism.

The essential lesson is clear: neither system of exchange rates is superior in any fundamental sense. Flexible and fixed rates both bring benefits and impose costs. Each is right for the right circumstances. Neither insulates a country from the effects of changing real conditions. In a world in which countries are united in their macroeconomic objectives, have overlapping unemployment/inflation preferences and possess the political will to harmonize monetary and fiscal policies, fixed rates will be appropriate. In a world such as the one we live in these conditions are not met. Flexibility of exchange rates is therefore the only viable option. While flexibility provides a measure of autonomy in matters of monetary policy, recent events have shown that reckless macroeconomic policies lead to volatile exchange rates and financial crisis.