

Benefits to international policy

[Economics](#), [Macroeconomics](#)



Describe the benefits to international policy coordination as set out in the Hamada diagram. Why is time consistency so important if policy coordination is to be successful? Use diagrams to support your arguments. The increase in interdependence of the world economy has significantly changed the lives of consumers. Being able to purchase things at a fraction of the cost that it would otherwise be if it had been produced nationally, and having access to a much wider variety of products has increased. This increased interdependence has created the term, globalisation, which is the breaking down of physical barriers to integrate regional economies into a single integrated economy. The effects of this are vast, including economies of scale and comparative advantage, to name a few.

Interdependence is now a necessary part in the world economy today, whether it is in the form of an economic monetary union or whether it is by trade flows. It is nearly impossible for one country's policy not to have an effect on another. However, using the USA as an example after the First World War shows us that isolating each country is not sustainable. The USA adopted protectionist policies, introducing high tariffs and quotas on all European goods, to encourage consumers to buy American. This strategy then collapsed, and showed the global economy that policy coordination is to be an imperative part of the way we go about things.

An economist called Koichi Hamada developed a model to help explain the main benefits for macroeconomic policy coordination. In this model, he takes two countries, assuming that both countries have two main objectives. These being that they want to achieve full employment, and that they want their trade balance to be equal to zero. One final assumption is that both

countries can only use monetary policy to try and achieve their main objectives. If we take two countries, these being France and Germany, then it is possible to construct the Hamada diagram.

Above shows the original state of non-cooperative policy making. With the money supply of France (M_{sFr}) on the y-axis, and the money supply of Germany (M_{sGer}) on the x axis.

O_{Ger} and O_{Fr} , and the reaction lines coming off them, refers to the optimum combination of money supplies that is preferable to Germany and France respectively. For example, the best scenario in terms of what the Germans would want, is to have a domestic money supply of M_{sGer1} , with France adopting a money supply of M_{sFr1} , creating the equilibrium of O_{Ger} . This point demonstrates that Germany wants France to expand, and as a result enjoy higher incomes and as a result, should enjoy a Trade Balance surplus. Point N shows the natural equilibrium without any policy coordination as it is a combination of money supplies which both countries are happy with. However, if indifference curves are added to this diagram it can become clear how it is more beneficial for both countries to coordinate with their policy making.

As shown above, there is evidence to suggest that coordinated policy making is more beneficial than non-coordinated. When there is no coordination between policy makers in the two countries, then both countries will be at their respective optimum points, and then slide along their reaction lines, until they are at the Nash equilibrium signified by point N. However, now that the indifference curves are shown, where the indifference curves closer to

each countries optimum are more preferable, it can be seen why coordinated policy making can be more preferable to both countries. The indifference curves act like shockwaves as they move further away from their optimum points, and the indifference curves further away from this optimum are effectively making each country worse off.

We can see that the Nash equilibrium is on the fourth indifference curve from the optimum points. Whereas, there is a point on the 3rd indifference curves, where both France and Germany would be happy with that combination of money supply. This tells us that both France and Germany would be happy with that mixture of money supply compared to the non-coordinated combination as this is sub-optimal. At this new coordinated policy mixture, represented by point C, both countries are now expanding from the original Nash equilibrium which as a result produces Pareto efficiency.

The Hamada diagram clearly shows that there are benefits to be gained for both parties if some form of policy coordination is undertaken. One of these benefits is removal of any uncertainty or risk from any policy making decision. As mentioned earlier, one countries policy could have big impacts on another. This can be demonstrated by the game theory approach to explaining the benefits of policy coordination. This shows how when one country uses expansionary monetary policy, and the other country does not, the first country would suffer whilst the other would benefit. Whereas, if there are agreements in place to coordinate policies then this removes any risk involved in beginning expansionary policies.

Another benefit of macroeconomic policy coordination is that it removes any risk of excessive deflation. Taking a two country model that are both in isolation to each other, and country A announces that there will be a reduction in the money supply growth in the future, and as long as ceteris paribus holds, then this will cause a real appreciation in the currency, while country B will suffer from a real depreciation. Clearly country B is worse off, so might try to compete with country A to avoid this depreciation. This is known as the Game of Competitive Appreciation, whereas if these two countries coordinated, they could come to some agreement, like the one shown in the Hamada diagram, where both countries benefit.

Macroeconomic policy coordination can however have some drawbacks. For instance, as explained earlier, in a two country model where both countries are in isolation, they will engage in the Game of Competitive Appreciation. However, Kenneth Rogoff argued in this paper called "Can International Monetary Policy Coordination be Counterproductive", he argued that despite coordinating and deciding to raise their interest rate together, this can have adverse effects.

He argued that although this does seem to be better for both countries, when you consider how the private sector may react to this, it can be seem to be a bad thing. This is because both countries using expansionary monetary policy could add an inflationary risk. Many rational agents within the private sector may react to this by increasing wage rates accordingly. This act could increase the average inflation rate above the original inflation rate that would have occurred in the non-coordinated model.

One major drawback of this model, is the problem of time consistency. This idea was first put forward by Kyland and Prescott in their paper, " Rules Rather than discretion the Inconsistency of Optimal Plans". The idea states that if one of the countries has an incentive to defect on the original agreement of policy coordination in the present or at any other time in the future, then the agreement is said to be time inconsistent.

The idea looks at the Game theory approach stating that if one of the countries does back out of the agreement, call it country A, then country A will reap benefits from the Game of Competitive Appreciation, whereas country B will become worse off. Country B may then be drawn into some form of retaliation, which will still result in them being worse off. It was then suggested that some form of punishment clause should be included into the original agreement to act as a disincentive to default on their original agreement.

It can be seen that there are clear benefits to be made from macroeconomic policy coordination for both countries engaging in it. Despite certain drawbacks, in particular the time inconsistency drawback, i believethese to be manageable to an extent where the original policy coordination can still produce benefits for both countries. On the topic of the third party drawback, this can be solved by engaging in an Economic Monetary Union which acts as a coordinated unit, an example of this could be the United States of American, and the European Union.