

The Social Relations of Exchange Rate Risk

January 28, 2021

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Abstract: This paper “pulls back the veil” to discuss what foreign exchange rate risk (ERR) means in terms of social relations. I argue that ERR can be understood as a reflection of economic policy autonomy for a people (typically a nation-state). Specifically, exchange rate risk is the individual-level cost of collective policy autonomy, and surrendering policy autonomy is the social cost of diminishing exchange rate risk. To delineate this, I define the concepts of intrinsic and extrinsic boundaries, and argue that exchange rate risk is constituted as the intrinsic boundary between peoples pursuing (or maintaining the capacity to pursue) independent/autonomous economic policy goals, while capital controls are an extrinsic boundary. Finally, I will situate this view within some existing theory and history, considering the “Impossible Trinity,” the demise of Bretton-Woods, the “one nation, one currency” rule, and the Euro.

JEL Codes: F02, F31, F33, B52

Keywords: Exchange Rate Risk, Exchange Rate Regimes, Social Relations, Modern Monetary Theory

Introduction

Karl Marx famously sought to strip away the superficial cosmetics of commodity fetishization to reveal the underlying social relations of production. Later, the “conflict theory of inflation” (Rowthorn 1977) exposed the social relations underlying price spirals, arguing that inflation can be understood as unresolved conflict over the distribution of real income between social classes. More recently, Modern Monetary Theory (MMT) has sought to illuminate the social relations of money, arguing that money itself *is* a social relation (with physical “money-things” only serving as records of

that relationship), namely a debt relation (Ingham 1996, Tymoigne and Wray 2006, Tcherneva 2017). In each case, these methods aim to transcend commonplace appearances to reveal a deep structure, taking something that appears technocratic or quantitative and exposing social and political issues underneath. In other words, they strive to “lift the veil” in order to show us “what’s *really* going on,” using a high level of abstraction in order to compress a complex and multi-faceted economic reality.

This paper, building on the MMT framework, also aims to “lift the veil,” to shed light on the social origin and nature of exchange rate risk. Exchange rate risk (ERR) is defined here as the uncertainty related to costs that an entity might be forced to bear as a result of changes in a foreign exchange price or structure; for example, the potential losses a speculator may incur if her portfolio goes long on a particular national currency. As in the aforementioned approaches, to shake out a deeper meaning from the apparent randomness of currency markets I will adopt a high level of abstraction, that focuses on societies as collective decision-making entities, and the boundaries between them. My conclusion will be that certain well-known difficulties with foreign exchange regimes can be rooted in an elemental contradiction related to trying to preserve differences of identity between elements while not maintaining some sort of border between them.

The paper is organized as follows. First I will briefly review the Modern Monetary Theory framework as pertains to exchange rate regimes, though emphasizing a conceptual shift required for my purposes. Next, we will need a high-level discussion of the nature of boundaries, in which I borrow a relevant concept from the sociology

literature on social boundaries, while defining my own concepts of intrinsic and extrinsic boundaries. With the prerequisites complete, I will then lay out my basic claim on the relationship between exchange rate risk and boundaries, with its ramifications for societal policy autonomy. Finally, I will situate this within existing theory and history, by applying the boundary view asserted here to the cases of the “Impossible Trinity,” the demise of Bretton-Woods, the “one nation, one currency” rule, and the Euro.

Modern Monetary Theory and Exchange Rate Regimes

MMT examines foreign exchange by identifying a spectrum of exchange rate regimes and noting their impact on constraining fiscal/monetary policy space. This spectrum for currency-issuers ranges from a completely free-floating currency, to a managed float, a fixed exchange rate, or a currency board. Operationally, governments act in FX markets by selling their own currency to buy foreign reserves (putting pressure to depreciate) or selling foreign reserves to repurchase their own currency (pressuring to appreciate). In order to perform the latter transaction, a government must have possession of, or access to, a supply of foreign currency. This makes domestic policy space contingent on the exchange rate regime: if the government has committed to engaging in transactions in FX markets, then monetary and fiscal policy must be conducted in such a way as to create an inflow of foreign reserves, or at least to not precipitate an ill-timed outflow. FX reserves are generally attracted through contractionary policy, such as raising interest rates to attract portfolio flows, or reducing domestic aggregate demand so as to reduce imports relative to exports. If the government were to run out of foreign reserves, then it could be forced to abandon any

exchange rate commitment. Therefore, for any exchange rate regime other than pure float, domestic policy space is reduced (Wray 2015, p. 191, Tcherneva 2017).

Finally, a nation can abandon its currency entirely, adopting a foreign currency. Domestic policy space is severely constrained in this case, because such a country actually needs to obtain foreign currency reserves before it can do any spending at all, and risks default if it cannot find willing creditors.¹ Besides nations like Ecuador (which uses the US dollar), this describes well the situation for the Euro nations, for whom the Euro is effectively a foreign currency since the national governments do not issue it.

It is most common in the MMT literature to address the preceding conclusions in terms of domestic policy space relative to the exchange rate regime, or in other words, the options available to government in relation to its commitments with respect to foreign currencies. Here I will take up a slightly different perspective. First, I will refer more broadly to society, treating government as a construct and agent of society, its collective decision-maker.² Therefore, rather than the somewhat-esoteric “domestic policy space,” I will take limits on government decision space to represent reductions in the economic policy autonomy of society: when a nation adopts an exchange rate commitment, that society's economic (monetary and fiscal) policy autonomy is reduced.

¹ By contrast, debt denominated in the domestic currency is better understood to run in the reverse sequence: government spends currency into the economy first, and then later sells bonds to drain excess reserves out of the banking system and to provide safe assets for savers to hold. If the private sector does not want to hold government bonds, preferring bank reserves and currency instead, then this has no impact on the government's ability to make payments in its own currency.

² This is simply an abstraction and is not to imply that governments are necessarily democratic or representative, or that everyone in society should be taken to be satisfied with the form or decisions of government. Rather, merely that it makes collective decisions, using some sort of political process, which are generally binding across the entire society. Thus saying that “government decisions are the will of society” may sound naive if the government is a monarchy, but I only intend it to mean that government is society's decision-making body, even if its structure is highly contentious.

Second, while MMT typically focuses on the institutional side of exchange rate regimes, our focus is the effect on individuals, and this is better served by discussing exchange rate risk. Obviously floating exchange rates entail the highest degree of ERR, as the price of the currency can change at any moment. A managed float reduces ERR, because an individual knows that the magnitude of exchange rate shifts will be capped. A fixed exchange rate further reduces ERR, but does not eliminate it: while price risk might be curtailed, structural uncertainty is not entirely, because there is risk that the government could re-value or float in the future. Finally, a nation adopting a foreign currency dramatically reduces ERR, although still does not eliminate it: there is always a chance that the country will adopt a new currency in the future. Greek and Italian nationals have had this uncertainty looming for many years as those nations routinely ponder leaving the Euro and reinstating their own sovereign currencies.

These are the conventional spectra of economic policy autonomy and exchange rate risk, but for completeness we should add an additional extreme to each: both policy autonomy and ERR are fully minimized if a government disbands, and its citizens are adopted into a (previously) foreign polity. Such a group of people obviously have no facility for economic policy autonomous from their neighbors, but also bear no foreign exchange risk with those neighbors.

The essential point of this paper is that these two spectra are dual to each other. In the absence of capital controls, as capacity for policy autonomy is increased exchange rate risk grows; as exchange rate risk falls, so must the capacity for policy autonomy. There is therefore a tradeoff, taking the form of dilemma between the group

and individual: the social benefit of greater policy autonomy comes at the individual cost of greater exchange rate risk, while the individual benefit of reduced exchange rate risk comes at the societal cost of reduced policy autonomy. This begs the obvious question: why? To answer that, we'll hunt for the underlying social relations of exchange rate risk, and to begin this we must examine the concept of a boundary.

On the Nature of Boundaries

Boundaries mark the dividing lines between different things. They can be spatial, such as a line on a map marking different counties or a wall dividing the United States and Mexico. But they can also be abstract: age 18 divides voters and children; an approval from a medical counsel divides doctors and non-doctors. When the items being bounded are themselves collections of elements or entities, then the boundary is manifested at the meeting or confrontation between entities from each group. They may present some sort of obstacle to crossing between groups, in which case the boundary can be called a barrier, but this is not necessarily the case.

For our purposes, I will subdivide boundaries into two types, which I term *extrinsic* and *intrinsic*. The difference between them concerns the relationship between the boundary and the defining or constitutive aspect of the groups. That is, an extrinsic boundary is one erected to divide groups that are already constituted as separate even without the boundary; whereas an intrinsic boundary is one that exists as a consequence of groups being unlike or separated groups (figure 1).

To elaborate, an extrinsic boundary is the product of, and must be maintained by, what sociologists call "boundary-work," which refers to the "kinds of typification

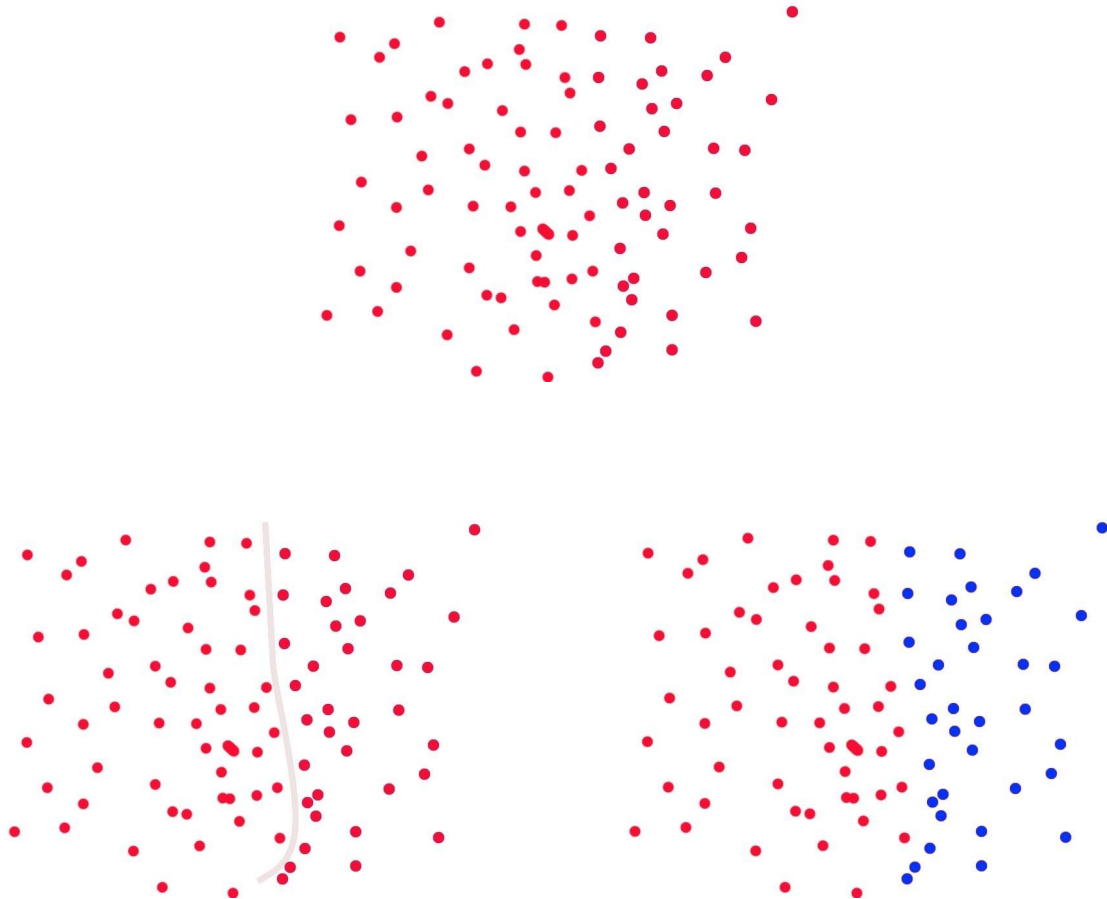


Figure 1. Extrinsic vs. Intrinsic Boundaries. Top: Two populations of entities. Bottom left: Division between groups of entities marked by extrinsic boundary. Bottom right: Intrinsic boundary, apparent at the border between groups, constituted as a result of the two groups being different.

systems... groups mobilize to define who they are” (Lamont/Molnár 2002, p.171), or what Tilly calls “imposition” if it is directed by an authority (Tilly 2004). A border wall is one example: Mexico and the United States are already differentiated places (as constituted by the territorial boundary, separate institutions, differing cultures, and so on) and building a wall is a deliberate act performed to strengthen or emphasize this pre-existing division. Another example is the efforts by scientists to clearly demarcate ‘science’ from

'non-science' in order to claim intellectual authority and channel material resources (Gieryn 1983): the scientists who effortfully reinforce this distinction already have an evaluative concept that differentiates between science and non-science, but choose to strengthen institutional separations between the two activities so as to reinforce their separateness.

Conversely, an intrinsic boundary is one that comes into existence solely as a consequence of elements differentiating into separate groups, and is observed at encounters of entities from each group. The boundary is produced irreducibly by the differentiation, and to eliminate the boundary implies eliminating the differentiation, therefore merging of multiple entities into one. Returning to the US and Mexico, whereas the physical barrier is an extrinsic boundary, the spatial but non-physical border between two countries is an intrinsic boundary: if a mass of land can be differentiated into more than one "place," then there will necessarily be boundaries where these places meet, simply as a logical consequence of them not being the same place.³

A language barrier is another example: if the two groups in question are "English speakers" and "Spanish speakers," then the language barrier that exists when an individual from one group confronts an individual from the opposite is an irreducible consequence of the nature of the difference between the groups. While the consequences of the boundary can be ameliorated, such as by employing a translator, the boundary itself cannot be eliminated without merging the two groups and eliminating

³ . But mere differentiation isn't sufficient to produce a physical structure such as a wall, which is why this is an extrinsic boundary, as the boundary itself is produced and maintained by boundary work.

the distinction. Another example is dividing lines between racially-segregated communities in the US today: there is usually no extrinsic barrier (no wall or fence or checkpoint) but there is an intrinsic boundary encountered, sometimes quite palpably, when a traveler passes through from the “White neighborhood” to the “Black neighborhood.” To eliminate this boundary transition would require eliminating the differentiation between the places.

This isn't to say that intrinsic boundaries can't be formed purposely, as a single group could choose to differentiate itself. For instance, a group could split randomly into segments, then stipulating that each subset, say, dress differently. At encounters between individuals dressed differently, those members would observe this difference; that constitutes an intrinsic boundary, where the two groups are separated by style. Or, divisive social processes may lead to increased differentiation of behavior and location between groups, such as economic inequality contributing to a cultural divide between “elites” and the rest of the population. But an extrinsic boundary exists in addition to differences between groups, while an intrinsic one is part of the inherent or definitional nature of that difference.

Intrinsic boundaries can contribute to the formation of extrinsic boundaries. For instance, there are prevalent cultural differences between upper class and lower class children in the school system (Lamont/Molnár 2002, p. 172) and these form an intrinsic boundary, which is apparent when students from the two classes intermingle. However, once these distinctions become institutionalized and form the basis for selection by the education system (ibid.), the latter becomes an extrinsic boundary between these social

strata. The intrinsic boundary arises from the nature of the difference between the classes—to eliminate the differences would be to eliminate the distinction—while the extrinsic one is constructed apart from it and reinforces or decides based on those differences.

Finally, we note that because intrinsic boundaries are a product of differences (observed at the meeting of unlike things), they can be more or less definite (figure 2). Boundaries between sharply different groups will themselves be sharply apparent,

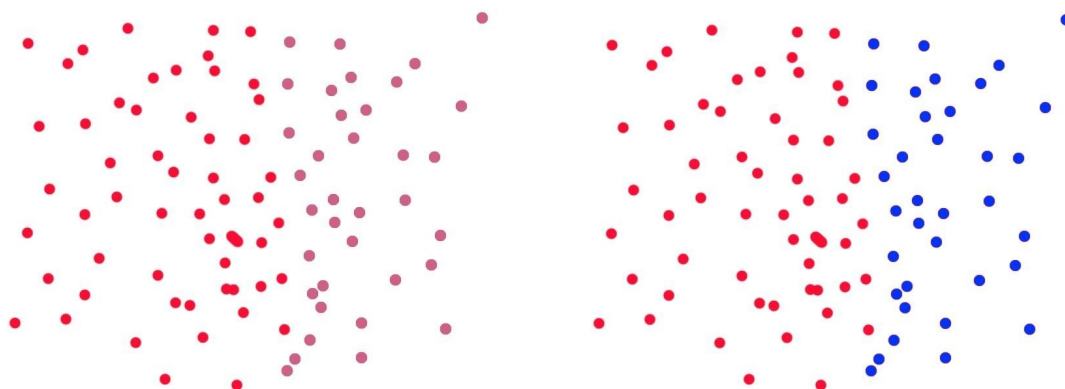


Figure 2: Definiteness of intrinsic boundaries. Left: Intrinsic boundary formed by fairly similar groups will have an indefinite, indistinct nature. Right: Intrinsic boundaries formed by sharply different groups will be more clearly differentiable and pronounced.

differentiated, distinct, pronounced. Boundaries between more similar things will be less apparent, distinct, or noticeable. For example, the language barrier between English and Spanish that speakers will encounter will be more intense than the language barrier between English speakers with dialects from Louisiana and Boston. Extrinsic boundaries can also be more or less pronounced, but this variation is a product of the sort of boundary work done, i.e. how sharp or intense of a boundary is constructed,

rather than reflecting an inherent property of the entities being separated by the boundary.

Monetary Boundaries

It is obvious that foreign exchange forms the boundary between currencies and transactions in those different currencies. I further claim that exchange rate risk is constituted as the intrinsic boundary between groups of people who claim economic policy autonomy, while capital and currency controls can be thought of as an extrinsic boundary. In short: pursuing (or maintaining the ability to pursue) different policy than some economic neighbor distinguishes people into groups. At the border between those groups must be a boundary. If no extrinsic boundary is specifically constructed, then the differentiation itself must necessarily constitute an intrinsic boundary, as encountered at confrontations between individuals from each group. That intrinsic boundary is ERR: in order to increase its claim of autonomy of economic policy, (in the absence of foreign exchange controls) the nation must relax foreign exchange commitments, with the result of increasing ERR. The sharper the difference between groups, i.e. the more their policy is distinguishable and independent, then the sharper will be the intrinsic boundary between them, i.e. the greater the ERR.

The nature of this social gain at individual expense occurs at the boundary of any group: the difference between groups is exposed (and possibly enforced) at the interaction between members of different groups, and the ongoing maintenance of group identity conditions these interactions. This gets at the underlying social relations of the policy autonomy vs. ERR tradeoff: exchange rate risk exists because different

peoples desire the ability to conduct their economic affairs differently. When the more primary desire of a people is to allay ERR, i.e. blur the boundary between groups (as experienced when members of each group interact), it can only come from reducing policy autonomy, i.e. making the two groups more similar.

Conversely, when the primary need is to enact policy distinct and in tension with that of the nation's economic neighbors, i.e. to sharpen the differences between groups, the boundary must be strengthened, either through imposing controls or moving towards regimes entailing more ERR, or both. However an important caveat is that a group *can* pursue its choice policies without strengthening boundaries in the case that those policies are not in conflict with those of its economic neighbors. To give an abstracted example, suppose that there are two cliques of friends, and that clique 2 prefers both to wear purple clothing and also to match clique 1's color scheme. To the extent that clique 1 also desires to wear purple, then there is no contradiction, and clique 2 can pursue its color preference and its policy of blurred boundaries. However if clique 1 decides to wear green, then now clique 2 finds itself in crisis, facing a choice between forgoing its color autonomy and thereby surrendering to clique 1's preferences in the name of eschewing boundaries, or pursuing its own preference for purple and in the process enacting a visible boundary between members of each clique.

This provides a bare but straightforward recipe for understanding changes in exchange rate regimes. According to Foster's principles of institutional adjustment, changes happen in response to social problems, and these adjustments must bring the state of institutions into "instrumentally efficient correlation" with the problem (Foster

1981, p. 932). The tradeoff of policy autonomy vs. ERR implies two possible problems: not enough economic autonomy to effect the nation's desired policy, or excessive boundaries such that ERR unduly hinders foreign trade or capital flow. We should expect the exchange rate regime to change when one or the other of these problems becomes urgent and dominant over the other in the minds of policymakers.

Foreign trade and capital flows can become dominant and increasingly urgent as supply chains are reorganized to cross national borders, particularly in times of relative political calm. At these times, the imperative is to blur hindering boundaries, rather than act independently, and hence during the recent era of globalization we have seen lowering of capital controls and movements towards monetary union. Conversely, policy autonomy becomes urgent and dominant in times of crisis; it is at these times that nations feel they must act decisively and independently, and this creates/requires clear boundaries between neighbors, and therefore ERR and/or currency and capital controls. It is therefore not surprising that most instances of nations choosing to float their currency have occurred during a period of crisis, such as nations abandoning the gold standard during wars and depressions, times when policy autonomy is paramount.

Foster additionally suggests that proposed institutional modifications "must do no violence" to the other institutions and aspects of life that are "not considered problematic" (Foster 1981, p.934). For a government with policy largely compatible with its neighbors to consider a fixed exchange rate then, does little such violence, whereas nations which have already adopted a foreign currency would do substantial violence to the everyday affairs of their citizens if they were to institute a new sovereign currency.

Boundaries and Exchange Regimes in Context

To briefly repeat, the basic view above is that the tradeoff between policy autonomy and ERR is not a coincidence, but is reflective of an elemental dilemma: it is a contradiction, impossible as a matter of logic, for two groups to *be* differentiated groups without some sort of boundary between them. In the universe of economic policies therefore, for a group to differentiate itself from another either requires construction of a boundary (currency/capital controls) or itself forces one into existence (ERR). In this section I attempt to put this view into theoretical and historical context by considering the “Impossible Trinity,” the end of Bretton-Woods, the ‘one nation, one currency’ rule, and the problems with the Euro.

The Impossible Trinity

The so-called “Impossible Trinity” was born out of the Mundell-Fleming model developed during the early 1960s which is now a staple of the international macro curriculum. Drawing on the uncovered interest parity (UIP) condition, it is a trilemma which states that a nation can only simultaneously pursue two from an independent monetary policy, a fixed exchange rate, and free movement of capital. To see the mechanics, consider the case of a country with free capital movement and a fixed exchange rate, whose central bank decides to lower interest rates below the world average. This move should increase financial outflows from the domestic currency, by savers looking to capture higher returns elsewhere. According to UIP, this arbitrage comes to a halt when the expected depreciation of the currency equalizes the return differential from the interest rate disparity; however with a fixed exchange rate, this

cannot not happen, so outflows should continue until, faced with the prospect of running out of foreign reserves and being forced to abandon the peg, the monetary authority relents and raises interest rates back to the world level to halt the exodus.

Corresponding stories can be told for the other two possible combinations.

Within the economic boundary view presented above, in order for groups to be different (pursue independent policy) there must be a boundary between them. That boundary can either arise intrinsically (the ERR from a floating exchange rate) or be imposed extrinsically (capital controls to restrict economic boundary crossings). The trilemma arises therefore from the impossibility of both being different from your neighbors, and not having a boundary demarcating that difference. The Trinity is merely a manifestation of this basic contradiction: to pursue an independent monetary policy is to differentiate, while free capital movement indicates a lack of an extrinsic boundary and a fixed exchange rate indicates a minimal intrinsic boundary. It is impossible in a logical sense to be different from your neighbors and yet have no boundary with them, and therefore it is impossible in a practical sense to permanently pursue an autonomous economic policy, free capital movement and a fixed exchange rate. Of course, the contradiction could be even more severe, if we were to replace the fixed exchange rate with adoption of a foreign currency.

Bretton-Woods

On Bretton-Woods, while a full history of the reign and demise of the system is far beyond the scope of this paper (though see Bordo 1993), just a few comments should situate it within the monetary boundary view. As is well known, the

Bretton-Woods system was an international payment system in which the US dollar was pegged to gold, while other currencies were pegged to the US dollar. Once again, fixed exchange rates are an attempt to reduce ERR, allaying the intrinsic boundary between economic zones. A universal commitment to full employment or expansionary fiscal and monetary policy within this system would only be possible if a) that collection of policies by each country happened not to be in contradiction to other nations doing the same thing or b) an extrinsic boundary was erected, in the form of capital controls, to allow nations to differentiate their policy. As capital controls were slowly relaxed, and it became apparent that respective national policies were indeed contradictory, the episode culminated in a crisis in which the member nations were forced to choose between altering economic policy to keep boundaries down, or to float their exchange rates, creating new boundaries but shielding domestic policy autonomy. They chose the latter.

Why should expansionary policy in two nations be a contradictory policy that leads to an exchange crisis? This could be due to differences in propensities to import driven by various structural factors like wages, productivity, supply chain structures, etc., Or, the tension could arise from differential rates of expansion, or differences in monetary policy leading to systematic speculative flows, or It could even be simply due to a happenstance preference by savers for the assets of a particular nation. Any of these could lead to systematic balance of payment surpluses/deficits; if the surplus country is willing to offer unlimited credit to the deficit country, compromising its monetary policy autonomy, then this can take the form of an ongoing accumulation of

claims; if not, then the deficit country will be running down previously-accumulated reserves, and will eventually be unable to defend its exchange rate. Countering these net flows in the absence of an exchange boundary generally requires altering the expansionary policy, thereby impinging on domestic autonomy.

One Nation, One Currency

As Goodhart (1998 p.420, quoting Eichengreen) has noted, there is a “robust regularity” throughout history that individual currencies are nearly always associated with individual fiscal authorities, often referred to as the “one nation, one currency” rule. For Goodhart, the explanation lies in the state’s use of taxation and the monetary system to provision itself and provide for law and order. This prompts it to create fiat money, and ensures that under normal circumstances said money will be adopted by the population.

I do not dispute this, but the boundary view and high level of abstraction offered here frames an additional simple explanation for why there are so few exceptions to this “one nation, one currency” rule, as a result of the desire for policy autonomy. That is, to the extent that a people desires economic policy independence, this requires a boundary with their neighbors and a policy authority, best achieved by forming a unique government with a sovereign currency. Conversely, to the extent that a people desires to become homogenous with their neighbors, this requires eliminating the national boundaries, accomplished by merging or federalizing governments and adopting a shared currency. Therefore, if the desires for integration or differentiation persist to their logical conclusions, we expect a splitting polity to adopt a new currency in recognition of

its new identity, or for merging polities to surrender an older currency in recognition of their joined identity.

The Euro

The broader political economy view of MMT already links currency to issues of politics and identity, and the boundary view here elaborates this linkage. By contrast, the neoclassical view sees money as a technocratic invention necessitated by exchange with the goal of reducing transactions costs. As Goodhart (1998) describes, this view as applied to spatial considerations culminates in the Optimal Currency Area (OCA) analysis, which argues that supply-side factors (such as labor market flexibility and the distribution of shocks) relative to adjustment costs can determine which geographies should 'optimally' share a currency and which should not. This doctrine became an intellectual argument in favor of forming the European Monetary Union under the Euro currency.

But to those with the social view emphasizing political identification, it was clear from the beginning that uniting multiple nations in a shared currency, but without a shared fiscal authority, was going to lead to trouble. Indeed, this is why Modern Monetary Theorists and others were able to predict from the beginning that the Euro was headed toward crisis (Kelton nee Bell 2003, Kelton and Wray 2009, Wray 2012). In the normal mechanical terms, the argument revolves a lack of central fiscal authority that is able to offset imbalanced trade flows between regions. The result is that nations with trade deficits also face a persistently increasing government debt, as automatic stabilizers move the budget toward deficit to offset rising unemployment, with little

political appetite from the trade surplus nations to rescue them when investors shift toward nations with less credit risk.

From the boundary view, forming a monetary union is the next nearest step towards merging identities completely, equivalent to adopting a foreign currency. However, failing to create the coordinating fiscal authority, opting instead to attempt to preserve independent national economic policies, is a step in the opposite direction, toward preserving autonomy. The Euro then is a contradictory institution: an attempt to blur the economic boundaries between European neighbors but without actually integrating identities by surrendering policy autonomy. Merge, yet without becoming the same.

As mentioned previously, different policies that aren't in tension with your neighbors' may be workable, but once these do become contradictory, as indicated by the imbalanced flows, then crisis isn't far behind. The contradiction must be resolved somehow, either by surrendering policy or reinstating boundaries. In broad strokes, this describes the situation faced by the debtor nations in Europe, and the options available going forward.

Conclusion

The methods and results of Modern Monetary Theory help us to understand the source of exchange rate risk, which is constituted as an intrinsic boundary between peoples who desire economic policy autonomy. This implies that the tradeoff between policy independence and exchange rate risk is actually a reflection of the underlying social relations, namely the tension between being different from another group yet not

having a boundary between groups. This offers a simple conception for various theories and historical developments in international macroeconomics, and one that centers group political identity rather than transaction costs or other technocratic concerns. Exchange rate risk, which traders and speculators encounter as an opaque, quantitative portfolio consideration, is shown to be constituted as a result of deeper social relations between independent polities.

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