Ragnar Nurkse's Rule-Based Approach to International Monetary Relations: Complementarities with Chicago

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Abstract

Ragnar Nurkse's contributions in the 1940s provide rules for international policy coordination complementing the contemporary position outlined by the Chicago economist Henry Simons. Nurkse's scheme was significantly different from Bretton Woods. Interwar currency and inflation experience underscored the ineffectiveness of sterilized intervention when proceeding with inconsistent monetary and fiscal policies and vague exchange rate commitments. Credible exchange rate rules are possible only with international coordination harmonized by inflation discipline. Nurkse uses an accelerationist, natural rate argument, thereby severely circumscribing attempts to subordinate monetary and fiscal policies to the growth of employment. Ultimately, countries participating in policy coordination must use macroeconomic policies to control the rate and variability of inflation. Nurkse's scheme depends on the anti-inflation and imported credibility messages embodied in his policy rules; insistence that rules be founded on publicly recognizable criteria; recognition of the NAIRU and negative view of trade restrictions and exchange controls. His analysis of policy coordination and scepticism regarding global schemes for international financial relations accord with received wisdom in the late twentieth century.

I Introduction

Modern literature is replete with economic histories documenting financial 'crises', causes of 'crises', and lessons from contemporary policy responses. Retrospectives on episodes of international monetary reform, the history of international monetary standards and proposed new monetary orders also abound. [1] There are fewer examples of intellectual histories in the field of international finance although potential for fruitful doctrinal study is revealed in Flanders (1989) which approaches the subject by classifying and contrasting different streams of thought over the period 1870-1960. We also adopt an intellectual history perspective, making Ragnar Nurkse's especially neglected work in the 1940s our primary focus. Nurkse studies various currency and inflation experiences as well as crisis periods in international monetary relations, and then offers a rule-based scheme to reduce the extent and frequency of crises.[2] This scheme was different from Bretton Woods: it was in fact closer to suggestions made on selected aspects of the subject in the immediate postwar years by Henry Simons.

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1 For example, Eichengreen and Portes (1987), Obstfeld (1995), Bordo and Schwartz (1997), and Tavlas (1997). On monetary orders past and present see Schwartz (1987), Bordo and Eichengreen (1993), and McKinnon (1996).

2 A crisis, consistent with Nurkse's usage, is a 'disturbance of financial markets, associated typically with falling asset prices and insolvency among debtors and intermediaries, which ramifies through the financial system, disrupting the market's ability to allocate capital' (Eichengreen and Portes 1987: 10).

By the 1950s, in Lundberg's estimation, Nurkse had become 'an economist of world fame'.[3] Flanders (1989: 208, 209) observes that Nurkse's 'classic' work, International Currency Experience (1944; hereafter ICE) made him a 'prototypical crisis writer'. Nurkse is widely regarded as having produced an 'authoritative' study of interwar currency experience (Yeager 1966: 300). According to Harberler (1961: x), he produced a 'classic in the field of international finance'. His work had no immediate progenitors; it was the product of an epoch involving some unique developments in international finance. That Nurkse systematically documents episodes of financial disturbance and currency upheavals and their putative causes, may account for some of his authority, but he also distils from these episodes a broadly applicable framework of rules and an approach to international policy coordination which has modern aspects.

In Section II we consider Nurkse's elaboration of governments' attempts to 'sterilize' the monetary impact of external payments shocks in a context devoid of international rules. A study of the foundations of Nurksian stabilization rules for the principal dimensions of macroeconomic policy follows in Section III. Section IV outlines Nurkse's doctrine on the

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3 Nurkse's intellectual profile is briefly summarized by Lundberg (1961: 7-8) in his introduction to Nurkse's 1959 Wicksell Lectures: 'we were fortunate enough to have as our guest an economist of world fame - Professor Ragnar Nurkse from Columbia University, New York. Professor Nurkse had as early as …the middle of the 1930s published a book in Vienna on international capital movements. As research worker in the League of Nations' economic department he was active in this field for many years and one most important result of his work was a League of Nations' publication "International Currency Experience" published in the year 1944. I consider this study to be the best available one we have of the lessons of international monetary relations during the interwar period'.

international coordination of macroeconomic policy against the background of an emerging Bretton Woods system; and it also demonstrates continuities between this doctrine, the immediate postwar Chicago, and late twentieth century treatments of this subject. We reflect on the enduring elements of Nurkse's classic contribution in the final section.

II Adjustment Without International Rules: The Problem of Sterilized Intervention

While ICE is a detailed record of country experiences it contains a core set of ideas generated from a survey covering a period of comparative international exchange and payments instability. Nurkse reviews an international monetary system which was linked to gold but in which there were heterogeneous means of international payment other than gold in circulation with varying degrees of acceptability over time - a 'mixed' system dubbed the 'gold exchange standard' and officially sanctioned by the Financial Commission of the 1922 Genoa Conference. In Nurkse's estimation the exchange standard was employed to avoid the deleterious effects of deflation in particular:

> The gold exchange standard was intended to be an anti-deflationary device and therefore in that sense "inflationary". Without it, the shortage of international currency might have led to a general deflation which would have 'corrected' the situation through a reduction in the value of international transactions and an increase in the output of new gold. With it, the gold shortage was made good by exchange reserves (ICE: 42, emphasis in original).

The salutary experiences of some countries which attempted to use deflation as a means of restoring gold parities reinforced widespread adoption of the exchange standard (ICE: 32).

Since the nucleus of the gold exchange standard system consisted of more than one centre country, any disturbance in economic activity - even a misperceived macroeconomic performance problem in any one centre - lead to erratic variability in the centre country's reserves and gold holdings with reverberations elsewhere. Insufficient cooperation between centre countries, particularly when it was not anticipated that a new party wanted to become a full-fledged gold centre (e.g. France) without international consultation and consensus, lead to liquidity shocks and exchange instability. The gold exchange standard was a fragile, fair-weather system such that when 'the comparative prospects of the various centre currencies became subject to discussion', sudden and disruptive capital movements were unleashed (ICE: 46). Nurkse's model of exchange standard collapse, of financial crisis, turns on understanding exchange rate management as part of the broader framework of monetary policy, and it points to the need for credible transnational rules.

Ronald McKinnon (1996) identifies several 'monetary orders' with attendant 'rules of the game' for various sub-periods, 1879-1992. However, notable for its absence is any characterization of an 'order' prevailing for the period covered by ICE, 1919-1940. Presumably for McKinnon, there was no identifiable 'order' in existence over the interwar period? Nurkse would have answered in the affirmative subject to the qualification that there were short-lived episodes of 'order' in the interwar period but these were not governed by any widely accepted rules of the game for central bank action in particular.

The idea that 'rules' operated under the pre-1914 classical gold standard was in Nurkse's view to oversimplify a complex system in which the rules 'were never laid down in precise terms' and were 'never more than a crude set of signals or signposts' (ICE: 67). The object in principle was to secure quick, continuous adjustment of payments imbalances, with central banks merely facilitating by following the rules which applied equally to gold and foreign credits. However, under the gold exchange standard regime in particular, there were crucial lags in response. First, there might be an inverse relation between a central bank's domestic assets and foreign assets from year to year; it may take 'two or three years' for those assets to adjust in the same direction (ICE: 69). Thus a decline in foreign assets consequent upon an improved trade balance might not be immediately reflected in domestic credit conditions. Whether these delays were designed or undesigned depended on country-specific monetary policy reaction functions. For example, was there a deliberately built-in policy lag to make domestic adjustment more gradual? Second, the short term commercial bank response to changes in the terms of central bank lending or to central bank open market operations might not be as expected, or might not be regular, thus sterilizing the impact of changes in foreign assets. An environment favourable to domestic expansion, with a calculated, accommodating 'degree of activity on the part of the central bank' may be thwarted by an interest- 'inelastic demand' for credit or a new-found, more risk averse approach in commercial bank lending portfolios (ICE: 71). In short, endogenous monetary responses dominate and sterilize capital flows in the short term (two or three years on Nurkse's reading). Commercial banks can behave 'recalcitrantly' and not be brought immediately under the control of crude rules of the gold standard or gold exchange standard which may have governed central banks.[4]

A third factor making for sterilization was evident in cases where changes in fiscal policy were not coordinated with monetary policy. Here for example, ICE (pp. 76-77) recounts the French experience after 1926 in which changes in government debt retirement to the central bank automatically acted to sterilize the domestic impact of gold inflows. Monetary policy was rendered ineffective since the prevailing market 'mood' was not favourable to taking up credit offered under an easy monetary policy. The sterilization of gold inflows in this case was not deliberate. Conversely, in the mid-1930s, a 'whole range of fiscal, social and political contingencies' in France led to increased government borrowing from the central bank in the face of a monetary policy aimed to sterilize gold outflows.

Nurkse's fourth reason for 'undesigned' sterilization turned on 'disequilibrating' capital flows which weakened the control of central banks over monetary conditions. The heterogeneity of international monies and monetary policy institutions compounded the problem. There was 'a competitive rather than a complementary relationship between foreign and domestic credit, and the supply of money to any single market was highly elastic' (ICE: 72). The periods of time are hardly very short - being five years in the cases of Austria, Belgium, Czechoslovakia, and Germany where short term capital movements made it difficult to discern a clear relationship between foreign and domestic assets. Capital flows aggravated a country's

[4] ICE refers to three examples, the Netherlands, Switzerland and the U.S.A. in the 1930s where 'movements in international reserves were partly or wholly "neutralized" in the sphere of commercial as distinct from central banking' (p. 91).

reserve position under fixed exchange rates rather than acting as passive financing instruments. Irrespective of central bank action, capital flowed toward countries in times of prosperity and conversely in times of recession; the problems of debtor countries were accentuated; adjustment by any supposed 'rules' was thereby delayed.[5]

The systematic sterilization behaviour of the Federal Reserve in the 1920s is adumbrated in ICE. The conjuncture of historical developments, including institutional arrangements, are represented as having created uncertainty in international financial markets. The increasing use of key currencies as financing instruments rested on confidence that such currencies would freely be convertible at a fixed rate into another asset and ultimately if required into gold at any time. However, would the commitment of governments to honor the gold cover for national currencies be time-consistent given the costs of doing so? A credibility problem lay at the core of the sterilization of U.S. balance of payments surpluses and the transmission of subsequent deflationary impulses elsewhere in the 1920s. More specifically, in the U.S. financial markets the gold influx up to 1925 was not widely regarded as long term that is, not equivalent to specie flows if all nations' payments balances were settled on the basis of a genuine gold standard. Moreover, all monetary policies were no longer formally regulated by gold reserve ratios thereby raising doubts about commitment to convertibility. Lastly, Nurkse dismisses the proposition that credit expansion in the U.S.A. from 1925 was a lagged response to previous gold inflows. Credit expansion was primarily the result of endogenous factors, for

[5] All this lead Nurkse formally to define 'disequilibrating' capital flows: 'a transfer which proceeds in such a direction that the discount or interest return on comparable assets is higher in the country of provenance than in the country of destination' (ICE: 72 note 1).

example, 'more economical use of the credit base through a shift from notes to commercial bank deposits' coupled with a growing preference for time over demand deposits (ICE: 76-77).

Throughout the 1930s attempts to sterilize what contemporaries considered to be 'disequilibrating' capital flows continued apace. ICE gives an account of associated bank failures, loss of confidence in both central banks and currencies in the 1930s, and the breakdown in financial intermediation (ICE: 81-82). The account demonstrates that deliberate attempts to sterilize the impact of external shocks in the interwar years were usually ineffective. ICE also documents a wide variety of sterilizing techniques some of which have little connection to intended central bank policy. The notion of a definite, existing set of 'rules of the game' in the period under review is completely dispelled. Yet rules that bound committed monetary policy actions through significant periods of time were vital at least in lending credence to an exchange rate commitment, that is to improving the likelihood, but not guaranteeing, the success of sterilizing interventions. In any case, for Nurkse, foreign exchange intervention cannot be regarded as a separate instrument of policy; there is no substitute for monetary policy.[6]

III Stabilization Rules for Three Main Dimensions of Economic Policy

[6] In reflecting on 'lessons learned or relearned' since the publication of ICE, Obstfeld (1995: 185) enters the following judgement: 'there was no compelling evidence that sterilized foreign exchange intervention, even when carried out by several countries acting in concert, is a reliable tool of expectations management independent of monetary and fiscal policies' (emphasis added). This lesson is made lucid in ICE.

While not wishing to provide a Utopian plan, Nurkse insists that means should be sought to achieve a 'maximum degree of international stability consistent with freedom to pursue autonomous policies to moderate the violence of economic fluctuations' (ICE: 191). The focus is on preparing a stabilization mechanism to avoid 'violent' crisis episodes. Failing that, the degree of policy autonomy would inevitably be reduced. With growing international demand for high levels of employment, stable incomes and social security in major industrialized countries post-1945, it was a mistake to attempt to achieve these goals using aggressive bilateralism, extension of commercial policy and exchange control. To minimize resort to these devices Nurkse offers a set of general rules for three dimensions of economic policy: exchange rate management, monetary and fiscal policy, and international investment and stabilization loans. We will deal with these dimensions seriatim.

1. Exchange Rate Policy

According to Nurkse, leaving currencies 'free to fluctuate from day-to-day under the influence of market supply and demand' was likely to 'result in chaos' (ICE: 137). The movements of exchange rates during the interwar years seemed much larger than movements justified by changes in relative national price levels (ICE: 114-118). Of note was the quite common case of a 'dramatic suddenness' of a fall in a flexible rate after a long period of slow downward momentum. Loss of confidence - 'sudden changes in anticipation' - made for discrete disturbances in line with the lumpiness of market information flows (Nurkse 1946a: 47). However, to express Nurkse's position as one which perceived two extremes: exchange chaos and capital misallocation as the alternative to some fixed but adjustable exchange rate associated with efficient international capital flows would be to trivialize his contribution. Indeed, speculation under flexible rates, given the right conditions, could be equilibrating (ICE: 116, 192-93; Nurkse 1946a: 46, 48). Nevertheless, on Nurkse's reading of the evidence, flexible rates were associated with significant exchange rate volatility and short term capital movements in the interwar years.[7]

With free capital mobility the option for a single country in isolation of fixing the exchange rate is not feasible. Any suspicion in the market that the rate is misaligned may not initiate a crisis but could increase short term capital movements which would become self-fulfilling unless a realignment was made credible. Lack of credibility will ultimately be the result of market expectations of fundamentals, further inciting capital movements which will be 'overpowering' irrespective of ruling interest rate differentials (ICE: 114, 116-17, 121). Prolonged interest rate rises or marked volatility in interest rates, depending on the case, could stem capital flows although the domestic costs may be considerable.

International cooperation to establish a contingent exchange rate rule was feasible. Exchange rates should be fixed but adjustable in an orderly manner; 'absolute rigidity of exchange rates' is rejected (ICE: 211). Exchange rate policy is best assigned to the balance of payments. An exchange rate should be set initially by using a centre country currency as numéraire - a currency which may not necessarily be tied to gold. Short term cyclical movements in the current account would use central bank reserves, supplemented as the case

7 Some empirical generalizations to this effect in ICE have since been justifiably disputed. See Friedman (1953: 176 note 9), Yeager (1966: 284-5) and Bordo (1993: 30-31).

demanded by short term finance and credits from trading partners, the centre country, or an international institution (ICE: 92-4; 221-29 and Nurkse 1946a: 57-8).

A 'crisis', that is, an exceptional 'severe and protracted slump' (Nurkse 1945a: 32) requires exchange rate realignment in order to spread the burden of necessary relative price adjustment on domestic income and employment. This position rests on the viability of effecting relative price changes through exchange rate realignment. If exchange rates are not adjusted, it could be 'difficult or impossible to secure adjustment of domestic money incomes needed to close a persistent gap in the balance of payments' (ICE: 225). It is preferable to restore confidence and long term capital flows by currency realignment provided crucially that the real exchange rate does not suffer further pressure by allowing the underlying inflation rate to accelerate. Deficit countries could, on the other hand, achieve slower adjustment by cutting money incomes with all the attendant initial output losses and unemployment. Much needed capital inflows would then, he predicted, be sluggish to respond.

The well-known ambiguities associated with the constitution of the International Monetary Fund (IMF) which provided for discrete changes in exchange rates of member countries, is dealt with succinctly in Nurkse's writings post-1944. The IMF rule stipulated a 'fundamental disequilibrium' in the rate of exchange as grounds for realignment. In ICE (1944: 226) there is already use of the phrase 'a fundamental and persistent disequilibrium'. Nurkse (1945a, b) was quick to offer operational guidance. Seasonal and cyclical current account fluctuations 'less than a year' were emphatically not grounds for rate changes, whereas a cumulative deterioration over 'two or three years' was an indication of disequilibrium. A sudden, exceptional net change in a country's international currency reserve brought on by short term capital flows would have to be assessed against real trade activity, and the threat of exogenous shocks such as political and social upheaval or war. In these cases exchange rate devaluation could be warranted (1945a: 7-11). Further, there were three additional indicators of some importance. First, long term capital investment may slow or halt. Second, if new trade restrictions or exchange controls are implemented, then it is likely that the exchange rate is not in equilibrium; old trade restrictions should be eased in countries enjoying persistent surpluses before resorting to exchange rate adjustments (1947b: 78). Third, 'it is hardly proper to call the exchange rate a true equilibrium rate' if it is maintained for several years by depressing aggregate money income. Therefore at 'different levels of national income and employment in a given country, equilibrium in the balance of payments can be secured at different rates of exchange' (1945a: 11). Nurkse settles on defining a 'fundamental disequilibrium' as that exchange rate which can only be maintained over the business cycle - a two to three year period - in conjunction with mass unemployment, major changes in capital flows, and price instability. Usually the indicators Nurkse refers to are observed in combination. In the final analysis exchange rate realignment contains elements of science and art, but it must be decisive to dampen the impact of anticipatory, speculative capital flows. Nurkse's contingent 'rule' on exchange rates, as with all his policy rules, crucially turned on having a 'publicly recognized and recognizable criterion' (1945a: 13). In fact it reduces to a set of imprecisely weighted operational indicators which, even if afforded quantitative expression still have to be included in a stable, transparent policy reaction function of some kind.[8]

[8] Bordo (1993: 84) reflects the modern view that the Bretton Woods rule on exchange rate adjustment collapsed because it was 'defective', since the 'fundamental disequilibrium contingency was never

Nurkse was well aware that his contingent exchange rate rule was not by its own right credible. Credibility had to be earned. First, it was assisted by using exchange realignments only as a defensive measure and not as an aggressive device to gain competitiveness and expand an extant trade surplus. Second, by securing international support using trading partners or newly developed international institutions, realigned exchange rates can be rendered more credible. Sterilized intervention to support a new rate will need international support to be effective, and exchange rate adjustment would be made only by multilateral agreement. Third, publicly transparent monetary and fiscal policy rules must be consistent with the exchange rate setting over time. Specifically, these rules must make it costly to pursue an inflationary policy.

2. Fiscal and Monetary Policy Rules

The foregoing exchange rate rule is underwritten by Nurkse's plea for international cooperation on exchange rates which required 'major powers' to determine exchange rates 'by mutual agreement' (ICE: 230). To speak 'as if all countries were more or less economically equal' is a 'dangerous simplification' (Nurkse 1945a: 21). Pax Americana ramified throughout international monetary relations in the mid-1940s. Here was an opportunity to establish international economic policy coordination on a hegemonic basis with one or two key currencies at the centre (ICE: 217-18). Stable, disciplined monetary and fiscal policies were a prerequisite

spelled out'. Early on, Nurkse attempted to address this problem.

for centre countries; anti-inflation policy was pivotal in Nurkse's schema, unlike its subsidiary (if any) role in the list of objectives of the Bretton Woods system's founders.[9]

In the Course and Control of Inflation (hereafter CCI), Nurkse (1946a: 76) contributes the conviction that inflation 'is a monetary phenomenon' and it must be controlled. Anti-inflation credibility has to be achieved if the exchange rate rule is to endure. Nurkse (1946b: 347) lamented the lack of explicit rules on both monetary and fiscal policy in the IMF constitution.[10] The incentive to rapidly inflate or deflate must be avoided to negate destabilizing capital flows. The pernicious costs of inflation are fully discussed in CCI (65-68, 76-79). The fiscal policy rule should aim at long term fiscal balance given that the 'main threat of inflation arises from a current excess of government expenditure over government revenue'. In CCI we also have the proposition that 'government deficits were the primary cause of inflation' (p. 68). Government deficit reduction was always slow given the seemingly 'irreducible' items in government expenditure (CCI: 76, 68). Notwithstanding fiscal rigidities, in the exceptional case of a crisis occasioning downward exchange rate adjustment, 'inflation is to be avoided' by cancelling 'some or all the compensatory increase of expenditure' that might have been triggered by automatic fiscal stabilizers or discretionary fiscal actions (Nurkse 1947a: 56).

What is Nurkse's monetary policy rule? He wants an 'appropriate...financial policy inaugurated' as a necessary 'preliminary' to exchange rate stabilization at any newly desired

9 More than the architects of Bretton Woods, Nurkse wrote extensively on anti-inflation discipline. Giovannini (1993) and Schwartz (1993: 149) rightly maintain that monetary discipline was not among the objectives of the Bretton Woods system.

10 Nurkse's colleagues at the League of Nations had earlier offered such rules, specifically monetary rules, and had recommended central bank independence. See Endres and Fleming (1998).

level. And this requires a disciplined policy aimed ultimately at price stability (CCI: 131). He presumptively exhorts the 'major powers' to use both fiscal and 'banking policy' in tandem and pursue 'good and steady employment without inflation' (1945a: 20). He qualifies this position by insisting that the policy mix must at least not accelerate the inflation rate. There is in fact more than one rule for monetary policy in all this, although it may be considered a 'single' sequential rule. The source of the disturbance to an economy matters and in some circumstances short term sacrifice of internal balance may be the legitimate responsibility of monetary authorities. Monetary policy (supported by fiscal policy) must in the long run maintain output and employment while avoiding a 'general and rapid rise of prices'. It must be focussed on the rate and variability of inflation (CCI: 75). Monetary policy is essential to accommodating the growth of output up to a level of employment consistent with a non accelerating rate of inflation and an exchange rate commitment. The return to high incomes and employment may nevertheless take time after a protracted crisis.

Nurkse adopts an accelerationist, natural rate argument of the kind that dominated discussion in the Phillips curve literature during the 1970s. He clearly anticipates the concept of a non-accelerating inflation rate of unemployment (NAIRU). It is the 'the minimum degree of unemployment attainable' at a given, constant rate of inflation. When monetary and fiscal policy is subordinated to the growth of output some countries may find '3 or 4 per cent' unemployment attainable without accelerating inflation (i.e., a 'general and rapid rise of prices'), others '6 or 7 per cent'. The postulate of rational expectations is not available to him, although he proceeds as if the trade-off between unemployment and acceleration of inflation is quite variable, even unstable depending on labour market institutions, 'government controls' and 'other circumstances' (CCI: 75; 1945: 59-60). Implicit here is variable public understanding of the relationship between policy and output which may temporarily result in different attainable unemployment rates. As that understanding improves, policy coordinating nations cannot independently choose an attainable unemployment rate but can control the nominal inflation variable.

A rigid monetary policy rule cannot be specified across countries. Coercion in the sense of a binding rule would be self-defeating. It was necessary to have an exchange rate commitment coupled with stable, time-consistent monetary policy attuned to a commonly held ultimate goal of 'full' employment. Exceptional exogenous disturbances may well require a future exchange rate realignment, but the reputation of monetary policymakers in holding the line on inflation as the proximate objective, would not thereby evaporate so long as the one-off exchange rate adjustment was appropriate. Ideally, the price level must be consistent in the long term with a high level of capital utilization in the international economy as a whole, with the first reference point being stability in leading industrial countries.

3. International Investment and Stabilization Loans

Controls on private capital flows in the post-war years must be liberalized. Exchange control is described as generally 'harmful and obnoxious', often used to protect misaligned currencies and delay inevitable adjustment (ICE: 222, 224). Stable exchange rates encourage normal capital flows for long term investment. Short term capital and inter-government stabilization loans, or funds from institutions such as the IMF, provide liquidity to defend exchange rates in the face of current account fluctuations. Once confidence in the future of a currency has returned, long term private funds and foreign portfolio investments follow (CCI: 58). Nevertheless, Nurkse provides a warning which should have been heeded since Bretton Woods: while exchange rate stability was essential, direct international loans and credit facilities 'were neither sufficient by themselves to bring about effective stability' (CCI: 131). Monetary and fiscal policy consistency was indispensable.

Ideally capital movements for direct investment should move in countercyclical fashion with creditor countries lending more when they were buying less from debtor countries. Capital reconstruction loans following a crisis were also relevant here. That conditions be attached to such capital flows was axiomatic. Sometimes international agencies provide funds by pooling risks and equalizing risk premia through the procedure of joint international guarantees (Nurkse 1945b: 293). Loan agreements must specify more consistent monetary and fiscal policies. Loan capital may be restricted where appropriate to the support of, or direct production of, tradeable goods. The rule for creditor countries in terms of their domestic policies was to maintain incomes at a high enough level to induce imports from debtor countries (CCI: 82).

Foreign control over some aspects of borrowing country policies was 'inevitable and, if wisely exercised, desirable'. Austerity programmes were a necessary evil, the more so when stabilization loans were not provided before a crisis had produced 'desperate necessity' in which case monetary disorder and price instability had already been destructive. The potency of such loans, not to mention long term private capital flows, in the crisis recovery period is reduced unless carefully targeted and conditional on specific structural changes (CCI: 56-59).

IV Toward International Coordination: Contemporary and Modern Intellectual Linkages

Nurkse's coherent 'doctrine of international coordination of national policies' has a distinctly modern flavour partly because it eschews capital controls and avoids the option of relying on trade policy interventions (Nurkse 1947a, 1947b). He distinguishes naively ambitious post-war plans to abolish the business cycle using Keynesian policies; badly designed attempts at international policy coordination aimed to 'synchronise...business fluctuations' thereby forcing countries to endure high variability in price levels (including deflation); and finally policies which would realize higher levels of employment and output with lower rates and variability of inflation (1947a: 58-62). He favored the last approach.

Policy coordination would aim to achieve 'international monetary equilibrium'. It would rest on the broad rules for the main dimensions of economic policy outlined in section IV above. In pleading for autonomy for each country to use broad monetary and fiscal rules Nurkse was allowing each country to choose the best domestically acceptable compromise given short run variability in local awareness of the relationship between the conduct of fiscal and monetary policy and employment. The length of the transition path to the long run remains opaque in Nurkse's work, presumably varying initially between countries undergoing adjustment. There is, however, no compromising over the NAIRU. Once the NAIRU is approached, macroeconomic policy is conducted according to the criterion of price stability.

The Nurksian policy rules are intended to produce internationally aligned price levels, freer multilateral trade and some correspondence among national stabilization policies. They depend on a hegemon. Monetary stabilization in the leading centre was important: that way an exchange rate anchored to the centre currency could import credibility but monetary independence would be sacrificed. This imported credibility argument has been made popular in modern international monetary economics (e.g., Giovannini 1993: 113). If the centre country strayed the stability of income, output and prices elsewhere would be jeopardized. Nurkse would doubtless have viewed the breakdown of international monetary orders after Bretton Woods as being located in the failure to maintain price stability in the U.S.A. after 1965.

Nurkse harbored scepticism about the prospects for a global regulatory agency or international governance structure, preferring instead spontaneously developed, mutually self-interested responses to organizing international monetary arrangements. That the IMF had been created did not mean that it need be anything more than a flexible agency for coordination and consultation among countries with similar macroeconomic objectives and for coordinating crisis advice and recovery measures. In the predicted turbulent reconstruction period post-1945 Nurkse provided a distinctive approach to institutional emergence in this respect: 'even without an international agreement, the spontaneous adoption and pursuit by different countries of the same basic objective - economic stability and full employment - is not an impossible hypothesis in these circumstances' (ICE: 231). When the Bretton Woods system had been established he averred that

> this idea of "combined international action", pleasing though it may be to the imagination, can be carried too far...Any scheme aiming, however discreetly, at some super-national regimentation of domestic fiscal and monetary policies would be certain to encounter political and psychological obstacles in the world as we find it. Besides, it would be unnecessarily ambitious (1947a: 60).

Nurkse attributed only loose policy rules to the pre-1914 gold standard. Just as that standard emerged 'freely and spontaneously' among participating nations with common objectives, any new successful system of loose rules must be the product of spontaneous inter-country collaboration (1947b: 74).

Centrally planned international cooperation utilizing formal binding rules and institutional arrangements could not be regarded as universally optimal. Optimal design was an ongoing collaborative process. International financial crises were unique, requiring episodic cooperation in different forms and in different geo-political regions or groupings. Cross-border spillover effects were also often spatially and temporally concentrated. The existence of a hegemon and 'spontaneous recognition of a common policy objective' were all that was required to provide that rationale for some modicum of explicit multilateral coordination (ICE: 232).[11]

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[11] Many of Nurkse's insights on policy coordination are comparable with modern treatments, especially Frenkel and Goldstein (1996), and Frenkel, Goldstein and Masson (1996).

The exactly contemporary intellectual linkages for Nurkse's rule-based scheme are closer to the emerging, embryonic Chicago School position than has been hitherto recognized. Nurkse and Henry Simons both held a common perspective favoring trade policy liberalization and removal of exchange controls (a theme clearly expressed in Simons 1943 and 1944b). Furthermore, a contemporary Chicagoan view on rules for international monetary policy is canvassed briefly in Simons (1943). Like Nurkse, Simons argued for 'cooperative or united action in matters of monetary and fiscal policy' (p. 244). Simons (1936), like Nurkse, considered the rules of the gold standard regime anachronistic while accepting that 'a gold-plated greenback – a dollar standard with a façade of gold – may prove more acceptable to other nations…and thus facilitate international cooperation' (Simons 1944b: 263). Simons recommended 'monetary stability' effected by a monetary policy conducted according to a price stability rule. His rule for fiscal policy was to minimize the degree of deficit monetization by conducting fiscal policy within the ambit of the same price stability objective as monetary policy (Simons 1943: 245; 1944a: 223). Indeed, Simons urged a policy of fiscal prudence which must be designed as an inextricable part of a monetary policy targeting price stability. Later Simons (1945: 294-95) favored 'vigorous leadership' on the part of the USA as hegemon in setting 'rules … for domestic fiscal policy'. He also viewed the Bretton Woods agreement as nothing more than an 'investment in international monetary-fiscal consultation and collaboration' and warned against overemphasizing the importance of 'global arrangements'.

The scope for a weak form of policy coordination in Nurkse's work (as in Simons' 1944a: 256) is delimited by the need to preserve some policy autonomy at the national level. It rested on the existence of a nascent consensus about international economic policy objectives.

Nurkse favored minimal cooperation insofar as national policy decisions should normally be decentralized. There would be mutual recognition of the potential for disruptive cross-border consequences from monetary mismanagement and regular inter-country consultation and information exchange. Significant trade interdependencies may give rise to spontaneous development of more formal arrangements especially if one or other trading partner endures a major disturbance. The incentive to coordinate on an ongoing basis may indeed depend on the degree of an economy's openness (Frenkel and Goldstein 1996: 23). Nurkse's doctrine of spontaneity allows explicitly for this possibility.

The depth of coordination will vary but at least the method is clear: macroeconomic policy would follow some broad rules, policy instruments being assigned in common across coordinating countries to specific macroeconomic objectives. Both Nurkse and Simons realized that rules, including the fixed, adjustable exchange rate rule, were means of enhancing the predictability of policy actions among co-operating countries (ICE: 222; 1945a: 19-21, and Simons 1943: 245). While not consistent with later Chicago views (i.e. Friedman's 1953 case for flexible exchange rates), Simons (1944b: 265-66) accepted the foregoing exchange rate rule as a 'readily attainable' method of disciplining inflation in the immediate postwar years. Thus Simons proposed a 'dollar stabilized in terms of a good, broad index of domestic prices'. Further, '[l]arge disturbances…probably would necessitate occasional alteration of exchange rates; but large disturbances are not to be expected with monetary stability in a substantially peaceful world' (Simons 1944b: 263-64; emphasis added).

Nurkse's general assignment prescriptions and broad rules are represented schematically below:

TABLE 1
NURKSE'S RULE-BASED SCHEME

Policy Instruments	**Assignment**	**Rule**
Exchange Rate Policy	External balance	Contingent rule: fixed, adjustable rate
Fiscal Policy	Internal balance, but external balance in the crisis	Sequential rule: balanced budget in long run; maintenance of income and employment to the NAIRU
Monetary Policy	Internal balance, but external balance in the crisis	Sequential rule : price stability in the long run but subordinate to exchange rate in the short run; support expansion of income and employment to the NAIRU
Commercial Policy	External balance	Liberalize; surplus countries to lower barriers
Investment Policy/Stabilization Loans	External balance	1. Liberalize capital controls 2. Cooperate with trading partners to enhance liquidity for credible sterilization 3. Provide inter-governmental, conditional loans and special facilities in crisis

V Conclusions

Nurkse's rule-based approach to international macroeconomic policy in ICE and CCI was a pioneering contribution. It constituted an early attempt to address the assignment problem. Policy coordination did not necessarily require significant modification of existing national policies. For Nurkse, there must be a common framework of objectives available ab initio.

This presumption is acceptable in retrospect given the increasing degree of international economic integration in prospect in the mid-1940s.

Nurkse's doctrine depended critically on three factors: (i) multilateral, spontaneous adherence to common policy objectives; (ii) the stabilizing role of the hegemon's (or centre countries') inflation discipline; and (iii) a common attitude to maintaining a low rate and variability of inflation. Wide dispersion in attainable unemployment rates among participating countries and the eventual surrender of sovereignty over monetary policy may have to be accepted by policymakers. These factors have been discussed in many guises since the 1940s, for example, in the contemporary work of Henry Simons and in the modern European Monetary Union debate.

The anti-inflation and imported credibility messages embodied in Nurkse's monetary and fiscal rules; his insistence that rules be founded on 'publicly recognizable' criteria; the avowed macroeconomic policy constraint represented by the NAIRU and his negative attitude to trade restrictions and exchange controls all accord with late twentieth century wisdom. Nurkse set aside early solicitude in such matters as the disruptive effects of short term capital flows, preferring instead to reflect on a rule-based scheme which, taken as a whole, would render these flows more stabilizing. All this was tantamount to making his perspective different from that which dominated Bretton Woods; we have presented evidence aligning Nurkse's scheme with contemporary Chicago. Moreover, Nurkse renounced rigidly planned global schemes for the solution of specific crisis difficulties and for governing international monetary relations in general.

At the core of ICE is recognition that arrangements for the transfer of savings from suppliers to demanders in the international economy were inherently fragile so long as there were many national fiat monies and multiple reserve assets of variable quality. The coexistence of exchange rate stability and free capital mobility was always seen as problematic with the former being taken as a prerequisite for the expansion of world trade and high employment. Capital flows were indirectly manageable in a system of transparent, commonly adopted policy rules, supplemented by concerted inter-governmental action in crises. Like Simons, Nurkse did not presume that IMF-type arrangements would be universally optimal, only that greater power must be ceded to a hegemon when any multilateral scheme is organized. The latter is more often viable in crisis and recovery episodes when the common objective is to reduce transition costs and cross-border spillovers.

Nurkse's contribution represents one of the most outstanding mid-twentieth century attempts to explain how responses to international financial crises and to more mundane monetary relations among countries, can be made more credible by commitment to rules. Policy coordination through broad rules could occur spontaneously and was very likely to be historically contingent, episodic and transient. Nurkse's message was modest by comparison with Bretton Woods though more enduring.

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