Review of International Political Economy 12:2 May 2005: 199–225

Commerce and demolition in Tsarist and Soviet Russia: lessons for theories of trade politics and the philosophy of social science

David M. Woodruff

Davis Center for Russian and Eurasian Studies and Visiting Associate Professor of Social Studies at Harvard University

ABSTRACT

Leaders of commodity-exporting states will sometimes push exports even when world prices are declining, if export receipts allow access to international capital markets. This article demonstrates that such state-mediated ties between commodity and capital markets shaped the politics of foreign trade in tsarist, and then Soviet, Russia. It also refutes an alternate, group-centered explanation of the same historical cases proposed in Rogowski's *Commerce and Coalitions*, pointing out serious empirical errors and oversights. These empirical problems have methodological roots. Searching for universal "laws," rather than sometimes relevant "mechanisms," limits the consideration of counterhypotheses to those that apply to a whole universe of cases, rather than a subset of them. Because such counterhypotheses serve to determine which data are relevant, their exclusion weakens the empirical tests to which proposed laws are subjected. Thus, the ambition for generality may cause scholars to become inadvertently too generous to the theories they seek to test.

KEYWORDS

Trade politics; capital importers; mechanisms; Stolper-Samuelson model; Russia; Soviet Union.

1. INTRODUCTION

Sellers confronted with a reduction in the price of their products do not always reduce the amount they supply. Sometimes, to make up for the lost revenue, they seek to sell more – what economics textbooks term the 'income effect.' Students of countries reliant on exports of primary products often encounter this effect. When commodity prices boom, states

Review of International Political Economy
ISSN 0969-2290 print/ISSN 1466-4526 online
http://www.tandf.co.uk
DOI: 10.1080/096922905000105441

accumulate constituencies, obligations, and ambitions not easily abandoned when prices sink. Thus, falling prices may prompt state officials to push increased exports to make up for lost revenue (Chaudhry, 1999, p. 338). A depressing example is the Soviet grain export drive of the early 1930's. Although grain prices were collapsing due to the Great Depression, the desire to maintain good external credit and finance machinery imports led Stalin to direct a ruthless campaign to extract grain from starving peasants for export. While unprecedented in its violence and destructive effect – millions perished – Stalin's policy logic recalled that of earlier tsarist officials, who also pushed grain sales into soft international markets in order to secure external credit. In both periods, this paper argues, it was *state* reactions to international commodity *and capital* market conditions that shaped the politics of trade.

This study analyzes the Stalinist grain export drive, and its tsarist forebears, to sustain this state-centered argument against an alternate, group-centered view proposed by Ronald Rogowski (1989). Rogowski argues that international trade trends affected the policy preferences and political resources of groups centered on different factors of production. Group preferences and resources, in turn, drove shifts in policy. Below, it is demonstrated that the historical account Rogowski uses to support this argument for the tsarist and early Soviet cases displays a number of serious empirical lapses. Of these lapses, the most fundamental is the failure to note the existence of the Soviet grain export drive of the 1930's. A fuller version of the historical record not only contradicts Rogowski's account of both periods, but also reveals parallels between the role of the state in the tsarist and Soviet periods that his theory overlooks.

The two depictions of tsarist and early Soviet trade politics just described differ not only in the causal influences they highlight and in the empirical backing they are able to muster. They also represent two distinct attitudes to the feasible scope of generalization in the social sciences. The income effect described in the first paragraph, Jon Elster suggests, is an example of a 'mechanism.' A mechanism is a 'sometimes true theory' which describes a recognizable sequence of causal connections occurring under circumstances difficult to specify exhaustively (Elster, 1998, p. 45). Elster contrasts mechanisms to 'laws', which state that given certain specifiable conditions a particular result ensues. Below, I argue that Rogowski's theory is an effort to fashion such a law-like explanation. A would-be law must correctly predict all cases to which it claims relevance. By contrast, the failure of a mechanism to operate in one potentially relevant context does not impugn its importance in others. Elster accepts that laws are the best form of explanation. However, 'because the best is so hard to attain, it can easily become the enemy of the good', i.e. explanations by mechanisms (Elster, 1998, p. 49).

Just how the best becomes the enemy of the good, however, is something that Elster does not make entirely clear. One might easily conclude that the distinction between the two approaches to explanation is overdrawn and of little relevance to research practice. After all, seekers of laws will tend to view mechanisms as insufficiently specified laws, and seekers of mechanisms may profit from others' would-be laws simply by renaming them mechanisms. In either event, there would seem to be no barrier to mutual communication between the approaches, and no particular reason to suggest that they might be inimical to one another.[1]

Yet more than preferences about terminology or scientific self-importance are at stake. Whether one's theories are understood as laws or as mechanisms, the mobilization of historical evidence in their support requires selection from the infinite number of facts those relevant to particular hypotheses. Relevance, though, is not self-evident. It is a function of the counterhypotheses considered. As Barrington Moore noted long ago, hypotheses are much like searchlights, revealing some facts while allowing others to fall into shadow. His conclusion was that investigators need 'many and even inconsistent theories' if they are to avoid 'pass[ing] over unawares a number of facts that suggest an altogether different interpretation of the problem at hand' (Moore, 1950, p. 3).[2]

A mechanism-based philosophy of social science, I wish to argue, does much more to encourage such multiple perspectives than a law-based one. The reason is that seekers of laws (at least those who take their philosophy of social science seriously) will sharply limit the counterhypotheses they consider. To see why, note that someone proposing a law-like theory covering a set of cases is making two separable assertions: (1) that *some* theory explains all the claimed cases, and (2) that the proposed theory is that theory. Assumption (1), variously known as the 'unit homogeneity assumption' (King *et al.*, 1994, pp. 93–4) or 'universalism' (Green and Shapiro, 1994), is a presumption that any seeker of laws must make, at least initially as a matter of faith. Without some willingness to hold onto (1) even in the face of evidence difficult to incorporate in a proposed theory, no search for a law can proceed. As long as (1) is adhered to, the only counterhypotheses a seeker of laws will consider systematically are those that apply to *all* the cases claimed by the proposed theory. This means that if (1) is false, accurate counterhypotheses that apply only to a subset of cases are not considered. These counterhypotheses never come to have the role of directing attention to relevant data, which may then be overlooked. Green and Shapiro, among others, have argued that universalism blocks an intellectually productive reaction to anomalous data. Characteristic unproductive reactions include making the theory elastic, either by rendering its predictions vague, or arbitrarily reducing its domain (Green and Shapiro, 1994, pp. 39–42, 44).[3] However, in the context of the contrast with mechanism-based social science, most striking is not the way universalism deals with anomalous evidence, but how the limitations on counterhypotheses universalism imposes inhibit the detection of anomalous data in the first place.[4]

Seekers of mechanisms (again, at least those who take their philosophy of social science seriously) should consider a far wider range of counterhypotheses and consequently be less prone to overlook inconvenient facts. Coleman's discussion of mechanisms shows why. Mechanisms, he wrote, 'are not theories to be confirmed or disconfirmed in general, but only confirmed or disconfirmed in specific applications' (Coleman, 1964, p. 75). Appropriate alternative hypotheses must be considered in each individual case (Elster, 1998, p. 49). There is no presumption, then, that the alternative hypotheses that disconfirm a particular mechanism in a particular case will be relevant anywhere else. Correspondingly, that a mechanism has been shown to operate in a particular case is no security for the claim that it is at work elsewhere. These sets of beliefs about what theory is likely to achieve thus mandate a deep engagement with the historical record in each application.

Below I present arguments that the pattern of historical errors in *Commerce and Coalitions* – not limited to the Russian and Soviet cases – is consistent with the claim that law-seeking historical research can fail to notice facts to which case-specific counterhypotheses might direct it.[5] (Thus, this is an argument not about the imponderable of why the severe historical errors plaguing the book in fact occurred, but rather about how a law-based approach failed to ensure their correction.)[6] Often, in line with Green and Shapiro's argument on how universalism produces elastic theory, the predictions are vague enough not to be too demanding of the historical record. Ambiguities surround predictions on the timing of trade's effect on politics, the goals pursued by trade-inspired coalitions, and the importance of realized versus potential gains from trade (Chaudhry, 1999, p. 318; Fenna, 1996, p. 79).[7] In certain cases, even these generous constraints prove impossible to satisfy, as the author forthrightly admits (cf. Irwin, 1990, p. 510). More often, though, Rogowski finds his theory sustained because of historical accounts that do not incorporate relevant facts and occasionally make flatly incorrect assertions about the historical record. An approach sensitive to counterhypotheses claiming less explanatory scope would have avoided these historical errors, however they entered the account in the first place.

The following section treats Rogowski's theory in somewhat more detail, setting out its main provisions and defending the claim that it represents a law-based approach to social science. Then I turn to the historical material from the late tsarist and early Soviet period, to provide support for the mechanism linking trade policy, and associated politics, to the intersection of conditions on capital and commodity markets. As befits a mechanism-based account, I try to give a fine-grained historical rendering that demonstrates the mechanism in operation, rather than a mere consistency of outcomes. I also seek, but fail to find, evidence that the mechanism portrayed in *Commerce and Coalitions* was at work. For both periods, the most serious problem is created by treating expanding trade as an exogenous variable, which misses how both tsarist and soviet rulers sought to *shape* foreign trade to serve the goals of industrialization and permit the import of capital (cf. Chaudhry, 1999, p. 338). The conclusion returns to methodological issues.

2. FACTOR-BASED GROUPS AND TRADE POLITICS IN *COMMERCE AND COALITIONS*

The theory of *Commerce and Coalitions* is as laconic as it has been influential. Following Stolper-Samuelson trade theory, Rogowski suggests that countries' economies are usefully characterized by their relative endowments of factors of production. These factors include, in Rogowski's model, land, labor, and capital. Stolper-Samuelson theory suggests that owners of relatively scarce factors benefit from a contraction in trade, while owners of relatively abundant factors flourish when trade is expanding. To this Rogowski appends a brief argument that shared economic interests regularly lead to joint political action, and that actual or potential economic power is readily turned into political power.[8] Thus, when trade is contracting, scarce-factor owners will ally to push further contraction over the objections of abundant-factor owners; they will often be successful, given the income benefits they derive from declining trade. When trade is expanding, abundant-factor owners unite and (often) prevail in pushing policies to promote freer trade. Thus, relative factor endowments and changes in world trade volumes combine to shape political cleavages among and political prospects of owners of different factors of production.

In formulation, nothing prohibits this theory from being interpreted as a mechanism, rather than a law. Indeed, Rogowski specifically abjures claims to the exclusive importance of his chosen variables, repeatedly suggesting that other processes may have been at work (e.g. Rogowski, 1989, pp. xii–xiii, 20, 38, 60). Yet the work's *de facto* methodology reflects a law-seeking approach. The case studies are canvassed simply to see whether the theory's strong predictions about social cleavages, and less categorical ones about political outcomes, hold. There is little or no effort devoted to showing the working out of the causal chain as proposed – for instance, connecting relative price changes to the character of political action and political influence in a precise way. Nor is there any effort to see if alternate hypotheses could explain the observed cleavages and political outcomes for particular cases. The main security for the theory's validity, then, comes from showing its predictions to be accurate for a large number of cases. Rogowski says as much, 'At most, the *empirical regularities* (emphasis added) that I shall note may serve to suggest the plausibility of the model and the value of further refinement and testing of it' (1989, p. 20, cf. 162). The claim is less modest than it may seem. To state that where I have failed, another may succeed, is to affirm the possibility of success. In other words, the empirical regularities imply a single theory – a single law – to explain them.

The danger in this approach should already be apparent. If the 'searchlight' function of the proposed theory and the absence of equally sweeping counterhypotheses inhibit the discovery of inconvenient facts, empirical regularities may be perceived where none exist. The initial universalist presumption that a single theory *might* bear on all the cases thus dances dangerously close to a self-fulfilling prophecy.

Below, I use the cases of tsarist and Soviet Russia to illustrate how this danger might become a reality. Several considerations support this focus on just two of the many cases *Commerce and Coalitions* analyzes. First, this focus enables a full-fledged search for detailed evidence that might support (though in fact impugns) the causal connections the book postulates, as well as presentation of the substantial evidence overlooked. Second, the focus is not unreasonable given the attention devoted to the two cases in *Commerce and Coalitions*: the discussion of tsarist Russia is by a significant margin the longest case analysis in the book, and for both cases Rogowski displays particular confidence in the results (as quotations given below demonstrate). Finally, the tsarist and Soviet cases also enable documentation of the alternate mechanism linking commodity markets and state borrowing, a mechanism simply not relevant to all of the cases.

3. TSARIST RUSSIA

Commerce and Coalitions argues that Tsarist Russia responded in predictable ways to the expansion of trade in the 75 years prior to World War I. The country was scarce in capital and rich in land and labor. Expanding trade implied that the owners of relatively abundant factors – workers and peasants – should have made economic and political gains. Meanwhile, representatives of capital – Rogowski casts the tsarist government in this role – should have resisted the expansion of trade and the political advance of workers and peasants. As Rogowski tells the tale, this is just what happened. The tsarist government imposed high tariffs to benefit industrial capital, and made extensive efforts to suppress the political power of workers and peasants. Workers and peasants, though, benefited from trade trends despite protectionist policies, and grew increasingly assertive. The revolution of 1917 represented the culmination of the efforts of workers and peasants to exploit the new resources expanding trade had given them.

Rogowski concludes, 'what the Stolper-Samuelson analysis leads us to expect [about Russia] seems to be sustained in uncanny detail' (Rogowski, 1989, p. 54). The data supporting this claim, however, are quite weak. The most fundamental problem concerns price trends. To support a link between rising trade and rising prices for agricultural products, as predicted by the Stolper-Samuelson analysis, Rogowski notes the parallel growth of grain exports and prices through the end of the 1870's (Rogowski, 1989, p. 49). However, although grain exports continued to expand after this date, grain prices actually entered a prolonged slump that only relented after twenty years.[9] Even in 1909–13, extremely favorable years for Russian agriculture, the average real prices of rye, wheat, and barley were virtually identical to what they had been in 1881–85, despite an export boom (see Figure 1).[10] In general, the data reveal no association between rising export volumes and grain prices.

A more direct way of approaching the Stolper-Samuelson predictions is to investigate the *relative* price of land-intensive and capital-intensive goods (see Figure 2).[11] Although one can find evidence of a very long-term trend of grain price growth to outstrip the growth of industrial prices, almost all of the gains for peasants are concentrated at the very beginning or very end of the period Rogowski discusses. If Stolper-Samuelson effects were driving price ratios, this was not a stable phenomenon. After the grain price spike stemming from the 1891 crop failure and famine had played itself out, the ratio of grain prices to industrial prices did not move past its moderate 1885 level until 1907, despite rising exports over the entire period. After 30 years of rising exports, and despite quite rapid grain price increases from 1905 forward, the relative price of grains and industrial products in 1913 was only where it had been in the (admittedly exceptional) years of 1880–81. For most of these 30 years, relative grain prices were well below the 1881 level.[12]

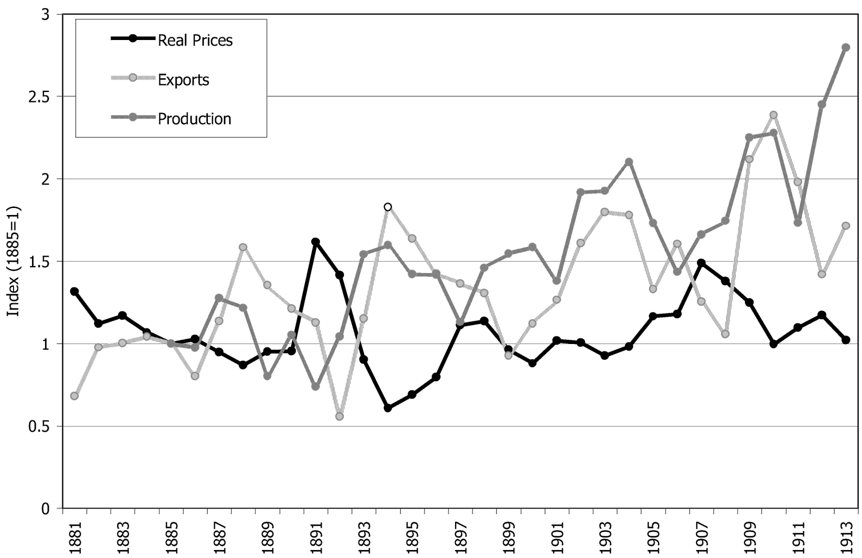

Figure 1 Russian grain prices, exports, and production.

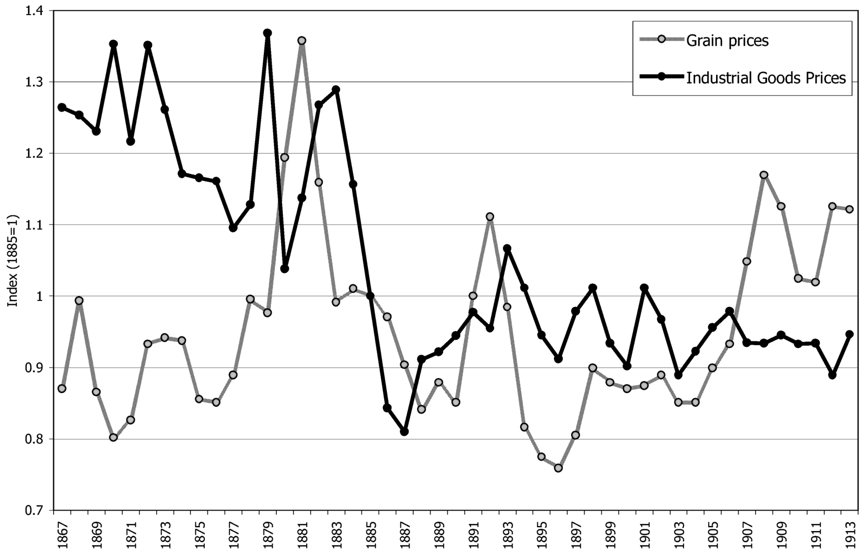

Figure 2 Relative prices of grain and industrial goods.

One should not deny that the position of agriculture improved over the period in question, especially after the 1905 revolution. Land prices and peasant land ownership greatly expanded in the 50 years after the end of serfdom in 1861, which suggests that at least some peasants had funds (Gregory, 1992, pp. 19–21). (Rogowski writes that land prices 'roughly doubled between the 1870s and 1890s and almost doubled again between 1905 and 1917' (Rogowski, 1989, pp. 49–50). It bears noting that these figures omit a long period of expanding foreign trade but declining or stagnant grain prices.) What is incorrect is to link these trends in a mechanical way to the growth in the volume of trade. It is also misleading to draw an unbroken chain through various instances of peasant insurrection in the late 19th and early 20th century, associating them with the peasantry 'gaining as a class', (Rogowski, 1989, p. 53) since these gains were far from consistent over this period.

Perhaps unsurprisingly in light of the forgoing, there is little evidence that peasant action was geared to trade issues. Rogowski himself notes that peasants were primarily concerned to expand their holdings of land, rather than eliminate the discriminatory trade policies that kept them from importing the capital needed to farm existing land more intensively (Rogowski, 1989, p. 53 n165). Land hunger, though, pitted peasants against nobles who retained substantial manorial holdings. Although it is true that peasants owned most agricultural land, and that nobles relied on other sources of income,[13] conflict among different categories of owners of an abundant factor is inexplicable in the framework of the theory. It may be, as Rogowski suggests, that denied access to capital, peasants were captivated by an 'illusion' that expanding their landholdings would lead to prosperity, but this was not an illusion that found its cause in Stolper-Samuelson effects (Rogowski, 1989, p. 53 n165). Indeed, this illusion was not shared by gentry landholders, who quite explicitly attacked high tariffs on imported equipment – with some success (Gatrell, 1986, pp. 168, 181). However, in other respects gentry landholders' political priorities, which Rogowski does not discuss, fail to conform to the theory's predictions. Much of Russia's abundant land was in the east, and government efforts to develop this area and promote its exports touched off bitter protestations by established producers in the central regions of the country (Gatrell, 1986, p. 135; Simonova, 1971, pp. 245 n27).[14] In short, divisions among owners of land are both manifest and extremely common, whereas there is little evidence of joint action on trade issues.[15]

The same applies, incidentally, to capitalists, left out of Rogowski's discussion entirely. Instead of being universally hostile to foreign investment, as the factor-based theory would predict given Russia's capital shortage, capitalists split into regionally centered factions pitting those opposed to foreign investment against those who benefited from it (Rieber, 1982). The last group was quite close to the state, treated as the exclusive representative of capital by Rogowski; the state, as discussed further below, also strove mightily to promote foreign investment.

As for worker priorities, Rogowski contends, 'urban workers were equally alienated from the system of protection' and that 'according to [workers'] spokesmen, tariffs had the further disadvantages of encouraging foreign ownership, overcapitalization, and cartels' (Rogowski, 1989, p. 51). However, the sources cited by Rogowski to support this assertion contain no evidence on the attitude of the workers' movement to tariffs, nor do they suggest that workers connected tariffs to the developments mentioned.[16] Although there does not seem to be an exhaustive study of the matter – since workers' concerns were primarily about working conditions and political rights (Bonnell, 1983; Freeze, 1988, docs 129–30) – there is some evidence that workers were in favor of protection. At any rate, workers on at least two occasions in 1905–06 complained that government orders were being directed to foreign producers rather than Russian ones (Freeze, 1988, doc. 127; Hutchinson, 1999, p. 99). Moreover, the core of the workers' movement was skilled workers and artisans—categories of labor in short supply (Bonnell, 1983).

Perhaps the most convincing evidence that trade trends cannot easily explain the pattern of worker and peasant demands and political success comes from Rogowski's own depiction of worker and peasant action during World War I as the culmination of pre-war movements. For the onset of World War I was accompanied by an enormous fall-off in foreign trade. Overall exports shrank to a small fraction of their former level. Export of grain all but halted (Gatrell, 1986; Mitchell, 1978, p. 167). The shrinkage in imports was less drastic in the short run, but only thanks to shipments of war materiel (Dohan, 1991, pp. 217–8).[17] On Rogowski's theory, these changes, unmentioned in his case study, should have had devastating effects on the power of the worker and peasant movement, while playing into the hands of capital. Instead, he holds that the revolution (at least in part) represented a triumph for workers and peasants made possible by their gains from trade.

It is not impossible to accommodate this fuller version of the empirical record in the theoretical framework of *Commerce and Coalitions*, though it requires a substantial reworking of the argument presented there. Thus, the failure of industrial and agricultural prices to converge in the late 19th century might simply be the effect of protectionism as well as the tax policies of the tsarist government, which as Rogowski notes worked to depress agricultural prices versus industrial ones (Rogowski, 1989, pp. 50–1).[18] Peasant rebellions would then reflect not class advancement, but a desire to realize 'potential gains' from free-trade policies (cf. Rogowski, 1989, pp. 5–6). The twentieth-century gains of agriculture, and the relative growth of agricultural prices after 1905, would then be the fruit of these rebellions.[19] Peasant and worker activism during WWI would reflect a desire to return to the high-trade *status quo ante*, or, alternatively, a lagged realization of the power earlier trade had given them. Such a recast argument might still be challenged on several grounds. First, even despite the rising agricultural prices of the twentieth century, the best available evidence suggests that the income of the industrial sector was increasing faster than that of agriculture during this period (Gregory, 1982, p. 73). Second, the evidence is that world markets, rather than Russian protectionism, accounted for the low relative price of grain products. The recast explanation would also still face the problem of explaining worker and peasant political actions, apparently quite distant from foreign trade concerns. Nevertheless, it would certainly correspond much better with the historical record. Of course, some might question whether an argument capacious enough to allow modification in this vein in fact makes determinate predictions.

Even in its recast version, though, the factor-based theory would still present the tsarist government engaged in an ultimately futile struggle to stifle the effects of trade trends beyond its control. Such an image is fundamentally inaccurate. The huge growth in grain exports visible in Figure 1 was the result of active state policy, not world trends. Russian finance ministers from the 1880's forward, and especially Sergei Witte from 1891, energetically *promoted* the expansion of trade.[20] Their motives reveal the dangers of failing to consider the context of capital importation and the structure of contemporary capital markets. Building on the policies of his immediate predecessors, Witte moved to implement a plan of industrialization that would rely above all on foreign capital (Von Laue, 1963;

Davidheiser, 1990). Foreign capital would provide the funds needed to build large factories, relying on the latest foreign equipment, as well as to finance large budget expenditures. However, Russia had enjoyed relatively little success in attracting foreign investments. On Witte's reasonable analysis, European lenders had been reluctant to commit capital to Russia due to its fluctuating and often inconvertible currency. Witte, therefore, sought to prepare for the introduction of the gold standard by accumulating gold reserves, especially through loans. He also worked to ensure a positive balance of payments so that these reserves would not be drained and so that creditors could be confident that their loans would be repaid (Crisp, 1976, pp. 97–8; Von Laue, 1963, pp. 138–46).

The policy worked. Foreign investments did grow substantially thanks to the embrace of the gold standard (Crisp, 1976; Gregory, 1979). Once the gold standard was introduced, Witte faced the challenge of maintaining reserves to sustain it, while ensuring that funds would be available to cover interest and dividend payments on foreign investments. His response was constant, active management of the balance of payments, especially that part of it due to trade.[21] Import-restricting tariffs, though they also served fiscal and protectionist goals, were one means to this end.[22] In conjunction with the valuable gold-backed ruble, protective tariffs also helped the balance of payments by promoting some substantial 'tariff-jumping' investments (Kirchner, 1981, p. 374; Davidheiser, 1990, p. 281). Import restrictions could not be absolute, however: industrialization required enormous imports of foreign machinery. To keep the trade balance positive, tsarist officials made persistent and energetic attempts to expand exports, especially of grain.[23]

The campaign for exports proceeded on many fronts. World trade did not accommodate itself automatically to Russia's ambitions. Germany, in accord with the famous 'marriage of iron and rye', pursued from the late 1870s a policy of restricting agricultural imports. Some of this protectionism was dismantled in a series of German treaties with European powers in the early 1890s. Russia, though, was excluded. The result was an intense trade war, as Russia did all it could to push the Germans to a more open posture (Kitanina, 1978, pp. 108–13; Schonhardt-Bailey, 1998, p. 293; Lazer, 1999, pp. 477–8).[24] In 1894, Germany and Russia concluded a trade treaty, opening Germany to Russian grain and Russia to German machinery (Von Laue, 1963; Crisp, 1976, p. 107).

One of Witte's first major policy initiatives, then, culminated with *decreased* tariffs needed to permit *increased* exports. As already noted, Witte pursued this initiative as part of his drive to implement the gold standard, which he saw as key to drawing in foreign investment. The intimate connection between Russia's capital attraction strategy and its trade policy emerged again in the 1904 negotiations for the treaty's renewal. Under a new administration, Germany was once again becoming protectionist, and

Witte had to conclude a treaty on significantly less advantageous terms.[25] However, he did extract a commitment that government policy would open Germany's capital markets for Russian borrowing (Vitte, 2001, pp. 459–60). Witte's efforts in this regard reflected how trade and capital attraction policy worked together; when protectionism was relaxed, alternate arrangements were needed to ensure capital flows.

Other export promotion policies concentrated not on opening foreign markets but on changes at home. Railroad building, and the setting of railroad rates, were both engineered to maximize export possibilities and incentives.[26] A variety of fiscal measures served to force peasants to sell agricultural produce even in the face of depressed market conditions. These included harsh enforcement of taxes and redemption payments, required as a condition of the serfs' emancipation in 1861.[27] Since redemption payments were not indexed to agricultural prices, the depressed prices of the 1880's and 1890's required more sales to meet these obligations (Gregory, 1992, p. 21). These measures were noticeably relaxed in 1904 and 1905 (Wheatcroft, 1991, p. 170; Falkus, 1966), possibly leading to the jump in relative grain prices after this date. However, there is ample evidence that these measures worked well up to then, in conjunction with the policies detailed above. Peasants did not reduce the share of grain they marketed at times when prices were low (Gregory, 1982, pp. 239–40; Gregory, 1994, p. 46), and export volumes depended on the size of the harvest much more than on prices (Falkus, 1966).[28] Furthermore, Russian exports continued to grow sharply despite depressed prices before 1904, suggesting that active government management of the balance of trade and efforts to direct grain from new areas of production abroad were effective.[29]

In short, an effort to attract foreign capital for industrialization and government finance through embrace of the gold standard implied attention to the balance of payments, and this in turn had far-reaching implications for trade policy. Foreign loans and the gold standard converted ambitions into obligations, and these obligations could be met only through exports. The tsarist government's policy was to expand trade, not to contract it. If tsarism indeed perished due to the gains foreign trade offered to owners of abundant factors, a conclusion that the evidence presented here gives ample reason to doubt, then the government not only created its own gravediggers, but also gave them shovels.

4. THE USSR

In Chapter 3 of *Commerce and Coalitions*, Rogowski turns to the effects of the decline in world trade in the post-WWI era. In a country scarce in capital in capital and abundant in land and labor, declining trade should benefit the owners of capital, strengthening their hand in the struggle with farmers and workers. 'Obviously', writes Rogowski, 'the post-NEP Soviet Union is the chief exhibit in support of these conjectures' (Rogowski, 1989, p. 76). The New Economic Policy (NEP) was a moderate, semi-capitalist policy that persisted from 1921 until roughly 1929. It was replaced by a violent collectivization of agriculture that expropriated peasant lands into new state-run farms, and a forced industrialization program relying heavily on coercive measures to control and mobilize labor. Rogowski argues the decline in world trade helps explain NEP's demise, because it expanded the power of the capital-owning Communist Party bureaucracy at the expense of the workers and peasants. He makes two particular links between trade developments and the end of NEP; in order to avoid confusion, it is best to quote them almost in full. 'Temporally', Rogowski claims, 'the abandonment of NEP . . . [was] closely associated with a drastic contraction, evident as early as 1927–28, in the already low levels of postwar exports; and with the consequent collapse of that leg of the NEP strategy that had counted on trade with the West.' He adds in a footnote that '[a]lthough the theory advanced here by no means posits a lockstep synchronization of trade and politics, it may be worth noting that Stalin's infamous article on the "great turn", which heralded collectivization and forced industrialization, was published on 7 November 1929 [reference omitted]; the great Wall Street crash, which presaged the total collapse of world trade, had occurred on 28 and 29 October' (Rogowski, 1989, p. 76).[30]

In my view, it is hard to read these passages without drawing two conclusions. First, the Soviet Union saw declining trade over the entire period from 1927 to the end of collectivization and rapid industrialization (circa 1933). Second, given that the decline in trade benefited the capital-owning Communist bureaucracy, and that 'beneficiaries of a change will try to continue and accelerate it' (Rogowski, 1989, pp. 4–5), Stalin's policy of industrialization and collectivization embraced, indeed was designed to exploit, declining trade. Admittedly, the second conclusion requires a bit more interpretation than the first, but still seems by far the most natural reading of the text.

Both these implications, however, are flatly wrong on the facts, as Figure 3 reveals.[31] NEP as a whole was a period of growing trade, and there simply was no "drastic contraction" of trade in 1927–8.[32] The opposite is more nearly the case. Exports were virtually unchanged, whether gauged by a volume index or current (gold) prices; imports actually *rose* by more than a quarter on either measure (Dohan and Hewett, 1973, p. 24; Mitchell, 1978, p. 306). Furthermore, the initial years of collectivization and industrialization, through 1931, saw an enormous *increase* in trade, especially when measured in volume rather than value terms. In volume terms, the trade boom concluded only in 1933. In any event, the trade figures clearly show that industrialization and collectivization were marked not by an embrace of autarky, but by sharply increased participation in international trade. As the journalist H.R. Knickerbocker put it in 1931, "In

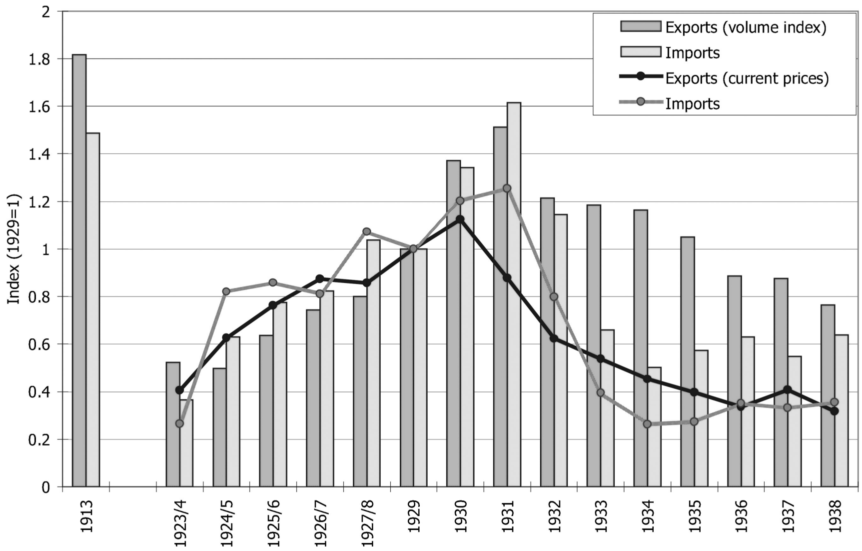

Figure 3 Soviet Foreign Trade.

a period when foreign trade of all non-Soviet countries is falling rapidly, Soviet foreign trade is increasing by leaps and bounds" (Knickerbocker, 1931, p. 3).

The source of Rogowski's error, it appears, is his use of grain exports as a proxy for all foreign trade.[33] Unlike overall exports, grain exports did fall off sharply in 1927–28 and 1929, as Figure 4 shows. Overall exports were maintained in these years through energetic campaigns of export promotion, illustrating once again how world trade trends cannot mechanically be extended to individual countries. Since it was precisely grain that fueled the surge in exports as collectivization and industrialization were launched, however, the use of grain exports as a proxy for trade was much less inaccurate after 1929. Rogowski overlooked, or considered irrelevant, data from two pages he cites for other information that captured the boom in Soviet grain exports in 1930 and 1931, when they reached levels not seen for over a decade and a half.[34]

Thus, the end of NEP was associated with expanding, not declining trade. Still, had Rogowski uncovered this fact, he might have been unimpressed by it. One could certainly emphasize the small size, relative to pre-WWI levels, of the trade recovery, arguing that the collapse of trade during the years of war and revolution determined the ultimate victory of Bolshevik-dominated scarce capital over abundant land and labor. This might make the argument more similar to that offered for the Italian and German cases, where Rogowski asserts that lower trade was strengthening

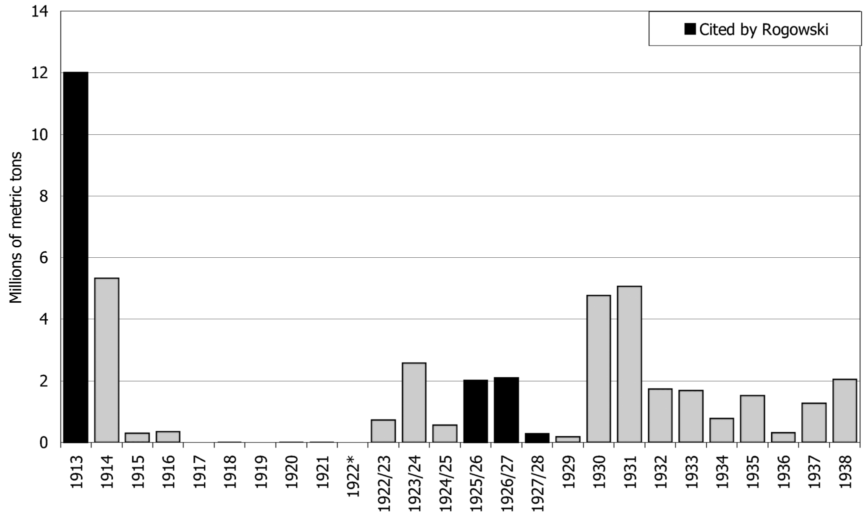

Figure 4 Soviet Grain Exports.

the hand of agriculture, land being scarce in these countries, from the early 1920's forward.[35]

Alternatively, the factor-based theory could be ruled inapplicable by arguing that the Soviet Union did not have a capitalist economy at any point after the revolution.[36] Even under NEP, many prices were fixed, and the state had an effective monopoly on foreign trade. Given that the Bolshevik's repudiation of tsarist debts had made financing balance-of-payments deficits all but impossible, the regime husbanded its gold reserves and struggled to maintain a positive, or at least neutral, trade balance through the 1920's (Dohan, 1969, pp. 381–411; Dohan, 1976, p. 620). Success was mixed, as Figure 3 reveals. Late in the 1920s, faced with disastrously low procurements of key export grains due to peasant resistance to the low prices the state was offering, the Soviets began exporting other goods in order to ensure foreign currency receipts, even when such exports did not show a formal profit (Dohan, 1969, p. 37). Therefore, one could certainly argue that by the period Rogowski discusses, the Soviet Union no longer had a market economy in which one might expect the Stolper-Samuelson argument to obtain.

Neither invoking a lagged effect of post-war trade declines nor declaring that the theory does not apply to non-market economies is attractive analytically. For trade circumstances *did* have a critical role in bringing on Stalin's 'great turn' and shaping its violent course, a role missed by either of these alternative arguments. As the figures above have already illustrated, if Stalin's speech announcing the new course was inspired by the coming crash of world trade, it was not because he intended to participate in it. Plans for rapid industrialization involved massive imports of foreign manufacturing equipment – in the event, the Soviet Union would account for more than 25% of US industrial machinery exports in 1931 (Sibley, 1996, p. 5). With capital markets largely closed to it, the Soviet Union needed to rely on huge exports of grain to finance these imports (Dohan, 1976, p. 611). Sellers of the equipment imported did extend trade credit, but such credit was very short term and would have to be repaid out of export receipts (Dohan, 1976, p. 630). It is no surprise, therefore, to find Stalin writing to a key henchman in 1930 'Force the export of grain to a maximum. If we can export grain, the credits will come' (Stalin *et al.*, 1995, p. 201). The historian Andrea Graziosi, who has surveyed Politburo records for the period, reports that the country's leaders were 'obsessed by export needs' and spent a huge amount of time managing the country's foreign trade and currency affairs (Graziosi, 1996, p. 58). Collectivization, by putting grain directly into the hands of state authorities, made these exports possible. These recent archival revelations accord nicely with the excellent earlier work of Dohan (1969; 1976), based on published sources.

Thus, in the course of Stalinist industrialization we see the same intimate connection between trade policy and the structure of capital markets that had characterized tsarist industrialization. We also observe, in incomparably harsher form, efforts to force agriculture commodity exports onto the world market at a time when prices were unfavorable (Graziosi, 1996, p. 58). Indeed, on the world market prices for commodities sank far faster than those for manufactures, moving the terms of trade sharply against the USSR (compare the value and price series of Figure 3), mandating even more desperate efforts to push exports (Dohan, 1976, p. 623; Dohan and Hewett, 1973). The need to expand trade further, not to exploit its putative contraction, pushed the Bolshevik leadership to demolish peasant society in the service of foreign commerce.

CONCLUSION

This article has presented two arguments. The first is empirical: it contends that tsarist and Soviet leaders' policies on foreign trade have to be understood not as the result of conflict among groups structured by factors of production, but rather in the context of state officials' need for access to international capital markets. This context explains, in particular, policies to push grain exports even when prices were weak. It was these policies, rather than a split over trade openness in general, that drove conflict between the state and the peasantry in both periods. The account is more than descriptive insofar as it expresses logic of connection between capital markets and trade with potential application to other cases; in other words, it offers a mechanism. This mechanism does not pretend to law-like status.

An effort to specify necessary and sufficient conditions for its operation would, in all likelihood, founder on the intricacies of the enforceability of sovereign debt, the rigidity of sovereigns' ambitions, and the multiple ways states can gain (or fail to gain) the ability to shape export flows against international price trends. For this reason, the operation of the mechanism would be a significant possibility, but not a foregone conclusion, in other capital-importing, commodity-exporting states.

The second argument is methodological. Narratives constructed to test theories conceived as mechanisms ought, in general, to be less prone to historical oversight that those meant to test theories conceived as laws. This is so because the vigorousness with which the historical record is examined is an increasing function of the number of counterhypotheses considered. Law-seeking research considers only counterhypotheses that apply to the full range of cases claimed by the would-be law, raising the risk that facts relevant to causal chains in only a subset of cases will not be discovered. This methodological argument should, naturally enough, be understood as a 'mechanism' itself; that is, as a theory about how universalist presumptions about social science *may* intersect with the data collection process to the detriment of historical accuracy. However, the serious errors of fact and interpretation in *Commerce and Coalitions* are at least consistent with the operation of this mechanism. The theory's causal path – trade expands or contracts globally, affecting the interests and incomes of factor owners in ways that shape their political actions and political fortunes – seems to have shaped the sort of data that was sought. Policies affecting trade levels, and the influence of international capital and commodity markets, were critical to the Russian and Soviet developments Rogowski sought to explain. However, the book shows no evidence the sort of systematic search for data on these alternate hypotheses that would have prevented theoretical predictions and mechanically extrapolated world trends from substituting for the empirical record.

Accuracy is not importance. Readers who find the empirical claims presented here convincing, and even those who accept the logic of the methodological argument, may feel the present author has overstated their significance. First, perhaps the tsarist and Soviet Russia cases were anomalous lapses, forgivable and probably inevitable given the sweep of the book. However, against this one may point out other significant cases in which Rogowski, by investigating only whether observed cleavages corresponded to his theory's predictions, failed to discern economic trends that contradicted his causal account. For instance, Rogowski argues that in the most developed European countries, scarce in land but abundant in labor and capital, the interwar decline in trade awarded new income and new political power to agriculture while weakening labor (Rogowski, 1989, pp. 78–81). Yet the data are squarely against this interpretation, showing very soft world prices that damaged agriculture badly in land-scarce and land-abundant countries alike.[37] In interwar France, to take just one example, the ratio of wages to land rents rose substantially and remained well above its prewar level. At the same time, the relative French prices for agricultural goods versus manufactured ones crashed: in the 1920's the ratio of agriculture to manufactured goods prices was only half of what it had been before the war, recovering to about three-quarters of the pre-war level in the 1930's (Williamson, 2000, Appendix, Table 1).[38] It is also difficult to regard the empirical problems of the tsarist and Soviet cases as anomalous, given an accumulation of work by other scholars on other cases that has demonstrated a host of historical oversights and errors (Hobson, 1997, pp. 184–5; Brawley, 1997, p. 638; Berman, 1998, p. 396; Fenna, 1996, pp. 73, 76; Schonhardt-Bailey, 1998, p. 301; Trentmann, 1998, p. 221).

Of course, these empirical problems might just be those of a particular scholar, not the fruit of a flawed understanding of the possibilities of social science.[39] Those adopting such a stance would have to provide an alternate explanation for Rogowski's failure to follow up pertinent facts his research did uncover.[40] He recognized that tsarist officials sought to promote exports. He noted that peasant political action bore little relation to trade issues. He sensed parallels between the capital-intensive industrialization programs pursued by Witte and Stalin, and presumably understood that the necessary physical and financial capital could only be imported (Rogowski, 1989, pp. 50, 164). He even acknowledged that world commodity prices fell more rapidly than prices of industrial goods in the inter-war period. Any of these points, like the cases where the theory manifestly fails, could have been enough to call into question the relevance of the causal path from exogenous trade shifts to Stolper-Samuelson effects to political change. Why they did not is, of course, unknowable. However, it is at least plausible that an epistemology open to the possibility of alternative hypotheses relevant to a subset of cases would have lent these facts a theoretical significance the law-seeking perspective denied them.

Few would deny that the agenda of comparative politics has often been advanced by work later shown to display significant empirical failings. Another potential reason to reject the significance of the methodological and empirical case against *Commerce and Coalitions* is that this case obscures the contribution the work has made. As Morris Fiorina (1996, p. 91) put it in defending the value of Mancur Olson's collective action theory: 'Every empirically based modification, generalization, or even rejection of Olson is an empirical contribution stimulated by his work.... Even seeming counter-examples that lead people to see matters in a new light are empirical contributions.' By this standard, any insights contained in the above analysis of tsarist and Soviet Russia would be evidence not of the failure of *Commerce and Coalitions*, but its productive role in the larger scientific enterprise.[41] Of course, this standard is subject to an obvious *reductio*: if I claim that all protectionism results from the efforts of politicians with purple hair, does your evidence-based rejection of my claim transform it into a scientific achievement? Arguing that NEP failed due to declining trade, though trade was expanding, is surely not productive simply in virtue of demanding a refutation.

A stronger formulation would say that while errors of fact are always regrettable, they are not necessarily significant if the theory at stake launches a 'progressive research program' that deals in a productive way with empirical anomalies while remaining true to its core analytical hypotheses (Lakatos, 1978).[42] A credible assessment of whether the literature drawing positive inspiration from *Commerce and Coalitions* corresponds to this description would require a sustained investigation that cannot be attempted here. However, my impression is that any such investigation would reveal that this literature has failed to overcome the troubling suspension of historical judgment at the heart of the work. To pursue any explanatory project in the social sciences naturally requires accepting, at least provisionally, that project as practical. But nothing requires that this acceptance be made without adequate reflection. Rogowski's working assumption was that Stolper-Samuelson could conceivably provide a universal explanation of trade politics for cases drawn from radically distinct moments in the international political economy. This assumption involves a deeply implausible and radically evacuated vision of the international economy, reducing it to a set of relative prices rather than patterns of interactions between particular national economies (cf. Chaudhry, 1999, p. 338). In other words, methodological choice ruled out discussion of matters of manifest importance. In Rogowski's narratives, international market context is limited to the autonomous expansion or contraction of a disembodied 'world trade', which in turn determines whose political fortunes will wax and wane. There are no commodity price booms and busts, but any postulate of limited volatility is only implicit. There is no gold standard, but equally no absence of a gold standard. There is no sovereign debt, yet no absence of such debt. Even trade itself is not a connection between countries, but something that faces each of them as an exogenous force.[43]

Creating the impression that there could be a useful theory of trade politics omitting these features of the world has not, I submit, been a productive legacy for the work that has followed. Rogowski stresses early in the book that his theory is 'conjectural and preliminary, and its application to specific cases is suggestive rather than conclusive.' (Rogowski, 1989, p. xiv). However, as he writes elsewhere, he intended his evidence to 'suggest the plausibility of the model' (Rogowski, 1989, p. 20). One implication of the methodological argument presented here is that even this limited aim requires holding empirical evidence to a high standard. Conclusions on the feasibility of a universalist explanation are too consequential, both for the focus of scholarly attention and the gathering and consideration of evidence, to be made on the basis of preliminary conjecture.

The epigraph to *Commerce and Coalitions* is a famously unapologetic passage from Barrington Moore's *Social Origins of Dictatorship and Democracy*, in which Moore justifies his cursory treatment of so much history. He pleads for empathy for the cartographers of comparative history, constrained to employ a scale that must obscure many cherished and instructive features. 'Generalizations that are sound', Moore writes, 'resemble a large-scale map of an extended terrain, such as an airplane pilot might use in crossing a continent. Such maps are essential for certain purposes just as more detailed maps are necessary for others.'

The metaphor fails to hold. A map is a guide to a *particular* place. Anywhere else, it serves merely to illustrate common features such as river valleys or mountain ranges, and some of their potential configurations. Knowledge of this sort is fallible, partial, and corrigible, yet indispensable. It facilitates exploration without determining it, offering insights that apply not *ceteris paribus*, but *mutatis mutandis*. As Max Weber argued long ago, comparative historians should not expect to achieve more. Familiarity with the powerful dilemmas capital importers often face does not allow one to predict the parallel grain export drives launched by Witte and Stalin. It merely aids greatly in discerning them, and analyzing the structures and contexts that shaped them.

When theory's reach exceeds its grasp, by contrast, the result is more compass than map. Explorers who strike a course north and keep walking learn little and miss much. If they are stubborn enough, though, they can end up just where they started.

ACKNOWLEDGEMENTS

I would like to thank Jessica Allina-Pisano, Suzanne Berger, Kanchan Chandra, Kiren Chaudhry, Yoshiko Herrera, Oleg Kharkhordin, Richard Locke, Roger Petersen, Richard Samuels, Ed Steinfeld, Jonathan Zatlin, and anonymous reviewers for comments on earlier versions of this article. My gratitude also goes to Richard Samuels for directing to me to a relevant passage from Barrington Moore. Remaining errors are mine.

NOTES

1 Elster's concern is that seekers of laws will fail to perceive mechanisms, and will see the alternative of only 'narrative and description' (Elster, 1998, p. 49). Yet he does not explain why these other generalizations could not be discovered simply as laws of more limited scope. Indeed, a portion of his argument is devoted to the transition 'from mechanisms to laws.'

2 The order of these passages has been changed.

3 Although Green and Shapiro discuss rational choice theory, their critique on these points would seem to apply equally to any sort of social-science theory with universalist aspirations.

4 This focus on the role of counterhypotheses in shaping data discovery is distinct from the argument given by Green and Shapiro (1994, pp. 42–4), who diagnose a tendency to focus on confirming data and ignore or mischaracterize problematic data. They link such problems to 'a profound desire to establish rational choice theory's breadth of application' (Green and Shapiro, 1994, p. 43).

5 Surprisingly little of the large secondary literature on *Commerce and Coalitions* has commented on this pattern of empirical inadequacy, though scholars have pointed out a number of individual mistakes. One exception is the eminent economic historian who stated, 'Specialists will undoubtedly discover factual errors in the area of their expertise' (Cameron, 1991, p. 832).

6 I wish explicitly to refrain from asserting that universalist ambition was the *factual* cause of the book's historical failings, though this seems far more plausible to me than alternative explanations such as superficial research or duplicity.

7 The duration of lags in Stolper-Samuelson effects is quite unresolved (Slaughter, 1998).

8 For a lucid critique of these mechanisms, see (Fenna, 1996, p. 71).

9 Rogowski cites price rises for rye in the 1870's of 30%, 77%, 85%, and 100% in four parts of Russia, but in roughly the same locations from 1881 to 1890 the real price of rye fell by 21%, 29%, 31% and 37% (Mironov, 1985); deflators from 'St Petersburg – All goods' index (Strumilin, 1966, p. 89).

10 Barley prices were up by 1.4%, whereas wheat prices were down by 2.6% and rye prices by 2.9%. Sources as for Figure 1: 'Real Prices' of Russia's three main export grains, wheat, barley, and rye, weighted by their average share in Russia's grain production during 1881–1913. Calculated from Mironov (1985) and deflators from 'St Petersburg – All goods' index from Strumilin (1966). Exports (all grains): Mitchell (1998, p. 403–6). Production: Gregory (1982: 238–40). Further details on data and calculations are available from the author.

11 Real prices are also relative prices, since they involve deflation against the price of a basket of goods. Figure 2 compares nominal prices for the two categories of goods.

12 Prices for animal produce (apparently meat, eggs, and dairy) and forest products showed a different pattern: moving roughly with industrial goods prices until the late 1890's, when they started increasing much faster. By 1913, prices on these categories of goods were 28 and 36% higher, respectively, than they were in 1881. As of the same date, prices on both grains and industrial goods were about 17% below their 1881 level. (Calculated from Strumilin, 1966, p. 90, also the source for Figure 2.) The distinct price patterns for grains and other land-intensive goods strongly suggest that other price drivers overshadowed Stolper-Samuelson effects. The text follows Rogowski and most historians in treating grains as critical to peasant welfare.

13 Rogowski (1989, p. 53) cites data that peasants owned 80% of land in 1916. In 1905, 69% of privately held land belonged to peasants and 22% to the gentry (Rogger, 1983, p. 85).

14 Witte shaped railway policy to push Siberian grain directly to export markets, which he felt would also avoid depressing grain prices in Central Russia (Kitanina, 1972, p. 197).

15 W. Daniel Garst similarly argues that emphasizing factors' shared trade interests obscures class conflict (Garst, 1998).

16 The cited sources are: (1) Nicholas Riasanovsky, (1977, pp. 470–2, 474–6), which presents a Gerschenkronian interpretation of industrialization at the expense of the peasantry and a summary history of the labor movement that does not include these themes. P. 474 notes that given large foreign industrial holdings,

'some Marxists even spoke of the "semi-colonial" status of Russia', but this is not connected to the tariff system. (2) Alec Nove (1972, pp. 17–8, 25). The first pages summarize Witte's system in terms similar to Riasanovsky, the second page describes workers' circumstances but not their attitude on trade. (3) Lionel Kochan (1966, pp. 17–9), also describes the Witte system's burden on the peasantry, and notes workers' 'disaffection' without stating motivations or linking it to specific policies. (4) Hugh Seton-Watson (1967, pp. 529, 531). The first page describes government policies to fund industrialization at the expense of the peasantry and the urban poor. The second page mentions critics' charges Witte was 'selling out Russia to rapacious foreign capitalists', but a check of Seton-Watson's source reveals that these critics were hardly worker representatives: Theodore H. Von Laue (1963, pp. 276–90).

17 Mitchell has partial current-price data, which are difficult to interpret due to roaring inflation during the war (Mitchell, 1978, p. 306). They show a huge fall in exports and a small fall in imports between 1913 and 1915, but in 1916 have imports doubling against those of 1915 and a small recovery of exports to a third of their pre-war level. These would have been imports of war materiel in any event. (Cf. Gatrell, 1986, pp. 138–9).

18 Indeed, Rogowski probably intended to link class conflict to both potential and actual gains; having argued for the trade-linked income expansion of peasants and workers, he writes, 'nothing like all the possible gain from increased trade flowed to agriculture and labor' (Rogowski, 1989, p. 51).

19 Some of the policies that may have tended to depress agricultural prices were relaxed after 1905. See below. Tariff policy, though, did not shift noticeably in agriculture's favor. (See Gatrell, 1986, p. 167).

20 Curiously, Rogowski mentions tsarist officials' desire for grain exports, but makes nothing of it (Rogowski, 1989, p. 50).

21 As one Soviet specialist put it, 'Increasing the positive trade balance of the country was S. Iu. Witte's constant goal, one for which he strove daily and intensely throughout his government career and which was the core of his economic policy.' She traces Witte's railway policy to this concern, rather than the defense of group interests; a Bayesian would weight heavily such a statement from a Marxist Soviet historian. (Kitanina, 1972, pp. 200–1. See also Davidheiser, 1990, p. 257).

22 For an interpretation that stresses the fiscal motivation of Russian tariffs, see (Hobson, 1997).

23 Davidheiser (1990, p. 222); as she notes, protectionism therefore reflected not autarkical impulses but, 'when combined with a policy of attracting foreign capital, . . . [a] deepening integration into the international economy.'

24 Interestingly, a threat to prevent seasonal migration of agricultural labor to eastern Germany's *Junker* estates seems to have been one of Russia's most effective arguments, raising the question of whether Germany's 'labor abundance' was a practical reality (Von Laue, 1963, pp. 109–10).

25 Renewed German protectionism, overlooked by Rogowski, fails to correspond to his claim that capital- and labor-abundant Germany had moved decisively toward free trade as predicted. (See Schonhardt-Bailey, 1998, p. 301).

26 Balance-of-payments motives jostled with strategic ones to determine Russia's rail-building policy from the outset. (Davidheiser, 1990, p. 141; Kitanina, 1972).

27 Historians have debated vigorously the accuracy of this characterization, which Rogowski also adopts. For a summary of the debate and a convincing argument that the peasantry did suffer heavy fiscal pressure until 1904, see (Wheatcroft, 1991, pp. 168–70).

28 OLS regressions on the data for Figure 1 replicate this result, although they suffer from serious problems of serial correlation and they have been omitted.

29 For similar examples of governments pushing exports despite low prices, see (Chaudhry, 1999).

30 Historians generally view this speech, delivered on the Russian Revolution's 12th anniversary, as intensifying and codifying policy trends unfolding over the previous two years, (e.g. Lewin, 1968).

31 Figure 3: Current prices: (Mitchell, 1978, p. 306); volume indices: (Dohan and Hewett, 1973, pp. 24, 27).Volume indices depend strongly on base year and price weights, and Dohan provides several alternatives. Trends in all are similar. Figure 3 uses the choices that show by far the *smallest* expansion in trade (column 5, p. 24; column 5, p. 27).

32 Until 1929, the USSR fiscal year ran from 1 October to 30 September so 1927–28 represents the 12-month period beginning in October 1927. Figure 1 omits data from the last quarter of 1928.

33 Since Rogowski's is not a specific-factors model, overall trade and not grain exports *per se* is important. In fact, grain used as fodder yielded eggs and butter, important Soviet exports in 1927–28 (Dohan, 1969, pp. 405–11).

34 Rogowski (1989, p. 76 n52) gives figures from Nove (1972, p. 112) on grain exports from 1913, 1925–26, 1926–27, and 1927–28, which with the exception of 1913 are identical to those from Mitchell. He does not include figures on the vastly increased grain exports of 1930 and 1931 from p. 180 of the same book, though he does cite this page in another context (1989, p. 76 n56). On p. 61, Rogowski cites figures from Mitchell (1978, p. 167) indicating, 'Russian grain exports . . . never exceeded 2.6 million [metric tons] in the 1920s.' He does not discuss the figures for the 1930's found in the same data column, which is the source for Figure 4 (except for the 1913 statistic, which is cited by Rogowski from Nove. Nove's 1913 statistic is roughly 33% higher than Mitchell's, but for all other years are identical).

35 These arguments, however, are also incorrect; see below.

36 This strategy would likely not appeal to Rogowski, who applies the theory even the much less market-like USSR of 1989, (Rogowski, 1989, p. 176–7).

37 Although Rogowski (1989, p. 62) was aware of these world price trends, he did not recognize that they could confound Stolper-Samuelson predictions in land-scarce countries, and did not further discuss them. On weak agricultural commodity prices in this period, see Hadass and Williamson (2001).

38 The trend was similar, though less dramatic, in Germany: the relative price of agricultural goods declined to 92% of the pre-war level in the 1920's, to 78% of the pre-war level in the first half of the 1930's, and only recovered to slightly above the pre-war ratio in the late 1930s, years in which Germany was already at war (Williamson, 2000, Appendix, Table 1; cf. Luebbert, 1991, p. 281). German workers' real wages also held up well through the 1920's (Luebbert, 1991, p. 255). For interwar Italy, I do not have similar data, but trade trends cast doubt on Rogowski's implication that agricultural incomes were surging in the 1920's. Average grain imports in the war years were 10% higher than in the five years before the war, and average imports in the next decade were 37% higher than during the war (Mitchell, 1998, p. 406). All of these data indicate that even despite reduced volumes of trade, agriculture in land-scarce countries suffered in a context of low world prices for grain.

39 As Chong (1996, p. 44) noted in criticizing the Green and Shapiro thesis that universalist ambitions promote tendentious readings of history, scholars of all stripes make empirical mistakes.

40 Since scholars seeking to prepare comparative histories rely on secondary sources, the filtering effect of a law-based epistemology on data relevant to less universal hypotheses is not absolute. The sources consulted for *Commerce and Coalitions* were extensive, and written from a variety of viewpoints. Sometimes, the data found manifestly contradicted the theory, as Rogowski noted for a few cases.

41 Cf. Green and Shapiro (1996, p. 276 n34).

42 Cf. Burawoy (1989); Green and Shapiro (1996, p. 256–9); Lustick (1997).

43 The most telling illustration: Rogowski (1989, p. 40), does correctly state that German trade policy was liberalizing during 1890–94, but fails to note the 1894 trade treaty when analyzing Russia. Each country's factor endowments, it is true, are relative to those in other countries.

REFERENCES

Berman, Sheri (1998) 'Path Dependency and Political Action – Reexamining Responses to the Depression', *Comparative Politics*, 30: 379–400.

Bonnell, Victoria E. (1983) *Roots of Rebellion: Workers' Politics and Organizations in St Petersburg and Moscow, 1900–1914*, Berkeley: University of California Press.

Brawley, Mark R. (1997) 'Factoral or Sectoral Conflict? Partially Mobile Factors and the Politics of Trade in Imperial Germany', *International Studies Quarterly*, 41: 633–53.

Burawoy, Michael (1989) 'Two Methods in Search of Science: Skocpol Versus Trotsky', *Theory and Society*, 18: 759–805.

Cameron, Rondo (1991) 'Review of Commerce and Coalitions: How Trade Affects Domestic Political Alignments', *American Historical Review*, 96: 831–2.

Chaudhry, Kiren (1999) 'Prices, Politics, Institutions: Oil Exporters in the International Economy', *Business and Politics*, 1: 317–43.

Chong, Dennis (1996) 'Rational Choice Theory's Mysterious Rivals' in Jeffrey Friedman (ed.), *The Rational Choice Controversy: Economic Models of Politics Reconsidered*, New Haven: Yale University Press, pp. 37–58.

Coleman, James S. (1964) *Introduction to Mathematical Sociology*, Glencoe: The Free Press.

Crisp, Olga (1976) *Studies in the Russian Economy before 1914*, New York: Barnes & Noble Books.

Davidheiser, Evelyn B. (1990) 'The World Economy and Mobilizational Dictatorship: Russia's Transition, 1846–1917', unpublished PhD Thesis, Duke University, Durham.

Dohan, Michael Repplier (1969) 'Soviet Foreign Trade in the Nep Economy and Soviet Industrialization Strategy', unpublished PhD Thesis, Massachusetts Institute of Technology, Cambridge.

Dohan, Michael and Hewett, Edward A. (1973) *Two Studies in Soviet Terms of Trade, 1918–1970*, Bloomington: International Development and Research Center Indiana University.

Dohan, Michael R. (1976) 'The Economic Origins of Soviet Autarky 1927/28–1934', *Slavic Review*, 35: 603–35.

Dohan, Michael R. (1991) 'Foreign Trade' in Robert W. Davies (ed.), *From Tsarism to the New Economic Policy: Continuity and Change in the Economy of the USSR*, Ithaca: Cornell University Press, pp. 212–34.

Elster, Jon (1998) 'A Plea for Mechanisms' in Peter Hedström and Richard Swedberg (eds), *Social Mechanisms: An Analytical Approach to Social Theory*, Cambridge: Cambridge University Press, pp. 45–73.

Falkus, M. E. (1966) 'Russia and the International Wheat Trade', *Economica*, New Series 33: 416–29.

Fenna, Alan (1996) 'Political Alignments, Political Economy and Political Change in Australia 1890–1940', *Australian Journal of Political Science*, 31: 67–81.

Fiorina, Morris P. (1996) 'Rational Choice, Empirical Contributions, and the Scientific Enterprise' in Jeffrey Friedman (ed.), *The Rational Choice Controversy: Economic Models of Politics Reconsidered*, New Haven: Yale University Press, pp. 85–94.

Freeze, Gregory L. (1988) *From Supplication to Revolution: A Documentary Social History of Imperial Russia*, New York: Oxford University Press.

Garst, W. Daniel (1998) 'From Factor Endowments to Class Struggle – Pre-World War I Germany and Rogowski's Theory of Trade and Political Cleavages', *Comparative Political Studies*, 31: 22–44.

Gatrell, Peter (1986) *The Tsarist Economy, 1850–1917*, New York: St Martin's Press.

Graziosi, Andrea (1996) *The Great Soviet Peasant War*, Cambridge: Ukrainian Research Institute Harvard University.

Green, Donald P. and Shapiro, Ian (1994) *Pathologies of Rational Choice Theory: A Critique of Applications in Political Science*, New Haven: Yale University Press.

Green, Donald P. and Shapiro, Ian (1996) 'Pathologies Revisited: Reflections on Our Critics', in Jeffrey Friedman (ed.), *The Rational Choice Controversy: Economic Models of Politics Reconsidered*, New Haven: Yale University Press, pp. 235–76.

Gregory, Paul R. (1979) 'Russian Balance of Payments, the Gold Standard, and Monetary-Policy – Historical Example of Foreign-Capital Movements', *Journal of Economic History*, 39: 379–99.

Gregory, Paul R. (1982) *Russian National Income, 1885–1913*, Cambridge: Cambridge University Press.

Gregory, Paul R. (1992) 'Rents, Land Prices and Economic Theory: The Russian Agrarian Crisis' in Linda Edmondson and Peter Waldron (eds), *Economy and Society in Russia and the Soviet Union, 1860–1930: Essays for Olga Crisp*, New York: St Martin's Press, pp. 6–23.

Gregory, Paul R. (1994) *Before Command*, Princeton, NJ: Princeton University Press.

Hadass, Yael S. and Williamson, Jeffrey G. (2001) 'Terms of Trade Shocks and Economic Performance 1870–1940: Prebisch and Singer Revisited', *National Bureau of Economic Research*, Working Study no. 8188, Cambridge, MA.

Hobson, John M. (1997) *The Wealth of States: A Comparative Sociology of International Economic and Political Change*, Cambridge: Cambridge University Press.

Hutchinson, John F. (1999) *Late Imperial Russia, 1890–1917*, London: New York.

Irwin, Douglas A. (1990) 'Review of *Commerce and Coalitions: How Trade Affects Domestic Political Alignments*,' *Journal of Economic History*, 50: 509–10.

King, Gary, Keohane, Robert O. and Verba, Sidney (1994) *Designing Social Inquiry: Scientific Inference in Qualitative Research*, Princeton, NJ: Princeton University Press.

Kirchner, Walther (1981) 'Russian Tariffs and Foreign Industries before 1914 – the German Entrepreneurs Perspective', *Journal of Economic History*, 41: 361–79.

Kitanina, Taisiia Mikhailovna (1972) 'Programma Ekonomicheskogo Osvoeniia Severa i Tarifnaia Politika S. Iu. Vitte', in Nikolai Evgen'evich Nosov (ed.), *Problemy Krest'ianskogo Zemlevladeniia i Vnutrennei Politiki Rossii: Dooktiabr'skii Period.*, Leningrad: Nauka, pp. 191–209.

Kitanina, Taisiia Mikhailovna (1978) *Khlebnaia Torgovlia Rossii v 1875–1914 gg.: Ocherki Pravitelstvennoi Politiki*, Leningrad: Nauka.

Knickerbocker, H. R. (1931) *Soviet Trade and World Depression*, London: John Lane.
Kochan, Lionel (1966) *Russia in Revolution 1890–1918*, London: Weidenfeld & Nicolson.
Lakatos, Imre (1978) *The Methodology of Scientific Research Programs*, John Worrall and Gregory Currie (eds.), Cambridge: Cambridge University Press.
Laudan, Larry (1990) *Science and Relativism*, Chicago: University of Chicago Press.
Lazer, David (1999) 'The Free Trade Epidemic of the 1860's and Other Outbreaks of Economic Discrimination', *World Politics*, 51: 447–83.
Lewin, Moshe (1968) *Russian Peasants and Soviet Power; a Study of Collectivization*, Evanston [Ill.]: Northwestern University Press.
Luebbert, Gregory M. (1991) *Liberalism, Fascism, or Social Democracy: Social Classes and the Political Origins of Regimes in Interwar Europe*, New York: Oxford University Press.
Lustick, Ian S. (1997) 'Lijphart, Lakatos, and Consociationalism', *World Politics*, 50: 88–117.
Mironov, Boris Nikolaevich (1985) *Khlebnye Tseny v Rossii Za Dva Stoletiia, xviii–xix vv*, Leningrad: Nauka.
Mitchell, B. R. (1978) *European Historical Statistics 1750–1970*, New York: Columbia University Press.
Mitchell, B. R. (1998) *International Historical Statistics: Europe, 1750–1993*, New York, NY: Stockton Press.
Moore, Barrington (1950) *Soviet Politics: The Dilemma of Power; the Role of Ideas in Social Change*, Cambridge: Harvard University Press.
Nove, Alec (1972) *An Economic History of the USSR*, Harmondsworth: Penguin.
Riasanovsky, Nicholas Valentine (1977) *A History of Russia*, New York: Oxford University Press.
Rieber, Alfred J. (1982) *Merchants and Entrepreneurs in Imperial Russia*, Chapel Hill, NC: University of North Carolina Press.
Rogger, Hans (1983) *Russia in the Age of Modernisation and Revolution 1881–1917*, London: Longman.
Rogowski, Ronald (1989) *Commerce and Coalitions: How Trade Affects Domestic Political Alignments*, Princeton: Princeton University Press.
Schonhardt-Bailey, Cheryl (1998) 'Parties and Interests in the "Marriage of Iron and Rye"', *British Journal of Political Science*, 28: 291–332.
Seton-Watson, Hugh (1967) *The Russian Empire, 1801–1917*, Oxford: Clarendon Press.
Sibley, Katherine A. S. (1996) *Loans and Legitimacy*, Lexington, KY: University Press of Kentucky.
Simonova, M. S. (1971) 'Problema "Oskudeniia" Tsentra i ee Rol' v Formirovanii Agrarnoi Politiki Samoderzhaviia v 90–X Godakh XIX – Nachale XX v', in Nikolai Mikhailovich Druzhinin and L. M. Ivanov (eds), *Problemy Sotsial'no-Ekonomicheskoi Istorii Rossii: Sbornik Statei k 85-Letiiu so Dnia Rozhdeniia Akademika Nikolaia Mikhailovicha Druzhinina*, Moscow: Nauka, pp. 236–63.
Slaughter, Matthew J. (1998) 'What Are the Results of Product-Price Studies and What Can We Learn from Their Differences?' *National Bureau of Economic Research*, Working Study no. 6591, Cambridge, MA.
Stalin, Joseph, Lih, Lars T., Naumov, Oleg V., Kosheleva, L. and Molotov, Vyacheslav Mikhaylovich (1995) *Stalin's Letters to Molotov, 1925–1936*, New Haven: Yale University Press.
Strumilin, S. G. (1966) *Ocherki Ekonomicheskoi Istorii Rossii i SSSR*, Moscow: Nauka.
Trentmann, Frank (1998) 'Political Culture and Political Economy: Interest, Ideology and Free Trade', *Review of International Political Economy*, 5: 217–51.

Vitte, Sergei Iulevich (2001) *Vospominaniia, Memuary*, Moscow: AST.

Von Laue, Theodore H. (1963) *Sergei Witte and the Industrialization of Russia*, New York: Columbia University Press.

Wheatcroft, Stephen G. (1991) 'Crises and the Condition of the Peasantry in Late Imperial Russia', in Esther Kingston-Mann, Timothy Mixter and Jeffrey Burds (eds), *Peasant Economy, Culture, and Politics of European Russia, 1800–1921*, Princeton, NJ: Princeton University Press, pp. 128–74.

Williamson, Jeffrey G. (2000) 'Land, Labor, and Globalization in the Pre-Industrial Third World', *National Bureau of Economic Research*, Working Study no. 7784, Cambridge, MA.