

RAINING ON THE PARADE: A CRITIQUE OF “ARMENIA’S TRADE PERFORMANCE IN 1995-2002 AND THE EFFECT OF CLOSED BORDERS: A CROSS-COUNTRY PERSPECTIVE”

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I. INTRODUCTION

The blockade exists because of issues involving national security and prestige as well as deeply felt ethical considerations. Removal of the blockade will, almost surely, necessitate difficult compromises in all of these regards. This is particularly true for Armenians (including those of Nogorno-Karabagh and the Diaspora), as they are the ones holding lands most likely to be demanded in a settlement and living with the memory of over a million dead. The degree of urgency for resolving the situation depends upon its degree of harm. The more severe the injury being done to Armenia by the blockade, the greater the advantage of resolving these issues quickly, even at the cost of painful concessions. But if the blockade’s impacts are minor, both absolutely and relative to alternative issues which could be addressed, resolution can wait until more acceptable terms are possible or even tolerated indefinitely. Following this line of reasoning, for all those who care about Armenia, the conclusions of Freinkman, Polyakov, and Revenco in their recent article in this Journal are welcome:

In the view of the authors of this paper, public opinion continues to overestimate the actual costs of blockade for Armenia....

Because, as we believe, Armenia has been losing much more from the deficiencies in the business environment than from the blockade, the top priority of the government policy should be aimed at all those elements of the investment climate, which in contrast to blockade do not require complicated international negotiations but are entirely under the government control. (Freinkman et al.)

In a nutshell, their message is that, while still significant, the costs of the blockade have been overblown, are declining, and are eclipsed by more readily correctable internal legal and regulatory enforcement problems. The reader is left with the strong impression that despite the blockade, Armenia is developing and can continue to develop a sustainable and prosperous economy.

However appealing, I will argue that Freinkman et al.’s analysis and conclusions are seriously flawed and the unpleasant reality is that the blockade’s impacts are very large,

markedly limit the potential of the Armenian economy, and constantly jeopardize the progress which has been made to date. This assessment is based on three factors:

1. Even accepting Freinkman et al.'s calculations at face value, their conclusions are, in part, based on logical inconsistencies and unsupported assertions;
2. Some cost elements likely to be significant, perhaps dominant, regarding the blockade were overlooked entirely; and
3. Both of the approaches used by Freinkman et al. to develop quantitative estimates of export losses have serious weaknesses, some of which the authors acknowledge. Arguably, the weaker of the two approaches used, which yielded the lower cost estimate, is declared as being superior and the other as "the most extreme."

II. INCONSISTENCIES AND UNSUPPORTED ASSERTIONS: INDIRECT COSTS OF THE BLOCKADE

Our ultimate assessment of the blockade is that, while still considerable, its effect is smaller than it is usually thought, and it has been declining steadily. At the moment, the blockade hurts Armenians much less directly (through higher transportation costs and lost volumes of exports) than indirectly --- through its overall impact on the depressed investors' expectations, inflated international perceptions of investment risks and depressed levels of FDI (Freinkman et al.).

The authors, I believe, are absolutely correct that the indirect costs dwarf the direct costs. The large bulk of their analysis involves estimation of what they refer to as direct costs, *i.e.*, transport costs and lost export volumes. Their discussion of the magnitude of the blockade's costs and their evidence for asserting steady declines in the total costs of the blockade are based solely upon the levels of and changes in these direct costs. In other words, even if their estimates of levels and trends in direct costs are correct, the authors ignore what they identify as the more important impacts of the blockade with regard to: investor expectations, perceived risk levels, and FDI.

At least, in part, their focus on direct costs may be attributed to the effective impossibility of developing quantitative estimates of the indirect costs. It is a common human tendency, particularly rampant among us economists, to sweep under the rug what we cannot measure. But that tendency can lead to incorrect conclusions and should be resisted, particularly when it is evident that the unmeasurable is large relative to the measurable.

III. GREATER IMPORTANCE OF ADMINISTRATIVE BURDENS

To understand better the real importance of the effect of closed borders, it should be placed in a comparative perspective, *i.e.*, its impact must be compared with other factors that affect Armenian exporters and importers. In this paper, we argue that despite recent improvements in Armenia's business environment, Armenian firms still face major unnecessary administrative barriers to their operations that inflate their costs and undermine their capacity to compete and export. The overall loss of trade due to the remaining administrative burden at the moment is higher than one associated with the costs of the blockade (Freinkman et al.).

Freinkman et al. argue that correcting administrative factors should be given priority as they are both more costly and easier to address than the blockade. Certainly, administrative reforms are desirable. Scant evidence is given to support their assertion that the costs of administrative factors outweigh those from the blockade. The authors cite a study by Rodrik et al.:

In their analysis of the interplay between growth, trade integration, geography, and institutions, Rodrik et al. (2002) showed the supremacy of institutional variables as the determinants of both income and trade levels.

That study was on Sub-Saharan Africa, a region renown for poorly developed, inefficient, and corrupt governmental institutions. That study's relevance to a landlocked, partially blockaded nation "recognized as a reform leader in the CIS" (Freinkman et al.) is debatable, to say the least. Certainly Armenia has and can continue to realize benefits from administrative reforms, but there are limits to gains from reforms and in a nation already well into this process returns from continued reforms are likely to be declining.

The only actual evidence presented regarding the relative costs of administrative burdens and the blockade is a case study of one firm, Armenian Copper Programme. The discussion deals only with the direct costs of the blockade. Moreover, the authors acknowledge that the firm should not be assumed to be representative and, as such, should not be used to draw overall conclusions about the economy.

IV. REDUCING COSTS OF THE BLOCKADE OVER TIME

Freinkman et al. argue that the costs of the blockade have declined steadily as Armenia has shifted into exports less susceptible to the blockade, such as jewelry.⁷² Though not stated explicitly in their article, it follows that production for domestic consumption has likewise shifted to emphasize goods which would bear high blockade-induced transportation penalties if imported. I concur entirely that such adjustments are made as businesspersons identify and exploit blockade-induced opportunities and curtail activities rendered unattractive due to the blockade.

As these adjustments are progressively made, the day-to-day cost to Armenia of existing under the blockade is reduced. Hence, Freinkman et al.'s assertion of a steady decline in blockade-related costs is plausible, indeed likely (even without actually examining indirect costs). If the blockade is permanent, the story ends there with costs trending downward, though certainly not to zero, as businesspersons, in arbitrage fashion, transform Armenia's economy. But if the blockade is not permanent, this process becomes a two-edged sword. The more that physical and human capital is committed to (diverted from) activities made more (less) attractive by the blockade, the lower the cost to Armenia of existing under the blockade, but the higher and more prolonged the adjustment costs when the blockade is removed.⁷³ In general, the better Armenia adapts to living with the blockade, the worse its position if the blockade is removed. The cost of post-blockade readjustments, albeit deferred, is a cost of the blockade.

⁷² Jewelry is less affected because of the high value to weight ratios of imported inputs and the exports and because these items normally fly over the blockade.

⁷³ This is directly analogous to post-war adjustment costs in which economies have overcapacity in goods and services no longer in high demand and the reverse for those with increased demand.

V. OMITTED COST ELEMENTS

Beyond not actually incorporating indirect costs of the blockade into their analysis, Freinkman et al. overlooked two significant, though hard to quantify, components of those costs.

VI. OUT MIGRATION

Human capital deteriorated in the 1990s, in part through migration. This has had deleterious effects both on quality of life and on the economy, as Armenia's once abundant skill base eroded (World Bank Group Europe and Central Asia).

Beginning in 1992, there has been net out migration from Armenia in every year. At 6.47 per 1,000 people in 2004 (CIA), Armenia has one of the highest net out migration rates in the world. Estimates of total net out migration since 1992 vary widely, from 0.5 to 1.5 million.⁷⁴ While Armenia gains, at least temporarily, from remittances sent by many of these émigrés, as expressed in the above quote, there is little doubt that the overall effect is markedly negative. There can also be little doubt that the blockade is an impetus for out migration through its real and perceived negative impacts on the economy, dangers of renewed hostilities, sense of isolation, and the military draft.

VII. AUTHORITARIANISM, TRANSPARENCY, AND CORRUPTION

Freinkman et al. assert that Armenia's economy can realize considerable progress by removing remaining administrative burdens to improve the business environment. This is essentially a call for government to become more consistent and transparent, and less corrupt and authoritarian. Certainly, no rational person could disagree. They further argue that these benefits would be greater than those that would result from removing the blockade. As I pointed out above, however, that Freinkman et al. present virtually no evidence to support this contention.

Finally, Freinkman et al. state that governmental reforms should be given priority over attempts to resolve the blockade, because the former would yield larger benefits and, unlike the latter, are entirely within the power of the government to effect. This is tantamount to asserting that these reforms are separable from the blockade; however, all governments, from dictatorships to the most democratic, become more authoritarian and less transparent when there are serious international security threats. In theory, a government could refrain from assuming such powers during an international crisis, but this rarely, if ever, occurs. At the very least, the removal of the blockade would be conducive to realization of the reforms called for by Freinkman et al. and, perhaps, necessary.

VIII. PROBLEMS WITH ESTIMATES OF DIRECT COSTS OF THE BLOCKADE

Freinkman et al. employed two approaches to estimate exports lost due to the blockade, a trade openness model and a gravity model. Their results from the trade openness model suggest export losses equivalent to 30 percent of GDP in 2002, while for the gravity model losses equivalent to about 10 percent of GDP were indicated. The authors acknowledged

⁷⁴ In large part the uncertainty is due to the fact that until 2000 records were only maintained for those entering and leaving the country by air.

potential problems with both approaches, but expressed much more confidence in the gravity model, at one point referring to the trade openness results as “the most radical estimates of under-exporting.” Problems regarding the application of either approach to Armenia are sufficiently severe that high confidence should not be placed in either approach. Moreover, of the two approaches, the gravity model, not the trade openness model, is more problematic.

IX. TRADE OPENNESS MODEL

Based upon Rodrik (1998) and using recent data which included CIS countries, Freinkman et al. explained the ratio of trade volume to GDP for 149 countries. In some equations, purchasing power GDP was used, and in others exchange rate GDP. The authors argued, and I concur, that the latter is more appropriate. As a measure of trade volume, either exports or the sum of exports and imports was employed. The explanatory variables were the natural logs of population and per capita GDP, as well as regional dummies.

The primary weakness of the trade openness model is that it does not take transport factors into account. So a nation physically remote from potential export markets is treated the same as a centrally located one. As Armenia is distant from the large markets of Europe, North America, and East Asia, at first blush one would think that applications of the trade openness model would exaggerate export shortfalls.⁷⁵ This is clearly not the case, however, as the dependent variable is not trade volume, but the ratio of trade volume to GDP. Viewed in this light, Armenia’s position may be favorable, at least relative to many other nations. For example, Canada undoubtedly gains from having an immediate neighbor, the United States, which has a GDP 14 times its own, to trade with. Armenia has two immediate neighbors, Iran and Turkey with GDPs 55 and 104 times its own, respectively. That having been said, a trade openness model is a recognized approach for gauging the degree to which a nation’s trading activities are consistent with those of other nations, and Freinkman et al. employed recent data on a large number of countries (149), including those of the Former Soviet Union.

X. GRAVITY MODEL

Freinkman et al. also employ a gravity model. The dependent variable is the total two-way trade for a nation. The explanatory variables relate the GNPs and languages of potential trading partners, distances between them, and the effects of trading blocs. Freinkman et al. correctly assert that gravity models are generally considered to be the best approach for gauging a nation’s trade performance; however, the data requirements for estimating them are considerably greater than for trade openness models. For that reason, the authors employ the parameter estimates from a gravity model estimated by Frankel (1997). Frankel based his estimation on 1992 data for 68 nations, not including those of the Former Soviet Union. Through a process not described in the article, Freinkman et al. create a CIS Bloc explanatory variable and assign that parameter a value equal to that estimated by Frankel for the ASEAN trading bloc.

As desirable as the gravity model approach may be, there is dubious value in a gravity model based on old data that does not even include the nations of the region of interest.

⁷⁵ That is, as Armenia would be treated identically to a more favorably located nation it would appear to under perform.

The authors acknowledge that “given the rapid expansion of international trade through the 90s, it could be that the gravity projections based upon older data are downwards biased” (Freinkman et al.) They correctly state that determining the extent of the bias would require estimation of a new model employing a larger sample. Nevertheless, some idea of the extent of such bias may be gleaned from the fact that, between 1992 (the year of data used by Frankel to estimate parameters) and 2002 (the year Freinkman et al. used those parameters to gauge trade performance), world trade increased almost three times faster than world gross product, approximately 75 percent and 27 percent, respectively. It is not surprising, therefore, that when “grading” Armenia using 2002 data and 1992 performance standards that the results are favorable relative to estimates using more recent data, *i.e.*, under-exporting equivalent to 10 percent of GDP for the gravity model versus 30 percent for the trade openness model.

XI. ARMENIA’S EXPORTS ALMOST BACK ON TRACK?

Freinkman et al.’s correct description of recent improvements in Armenia’s exports coupled with their embracing the 10 percent of GDP under-exporting estimate conveys the impression that the country is almost back on track, at least with regard to mitigating the direct costs of the blockade. Is this the case? In Figure 6.1, below, the relationship in 2002 between exports and GDP are presented for the nations of the Former Soviet Union. Even after the impressive gains in exporting made between 1999 and 2002, only Georgia’s performance is marginally worse than Armenia’s, exports equal to 28.7 percent and 29.5 percent of GDP, respectively. Freinkman et al. point out that just over a fifth of Armenia’s exports are cut diamonds and that only 15 to 17 percent of the export value represents value added within the country to the previously imported uncut diamonds. If adjustments were made to subtract out the value of those imports, as the authors do in some cases, Armenia’s 2002 exports fall to around 25 percent of GDP, well below Georgia.

If the blockade was not an impediment, what would one expect to be the normal level for Armenia’s exports? To answer this, one should consider that: (1) by the Freinkman et al.’ own reckoning, Armenia already is “recognized as a reform leader in the CIS;” (2) small nations tend to export more than larger ones relative to their GDPs; and (3) relative to its size, Armenia by far has the largest diaspora of the CIS countries interested in making investments and predisposed to purchase Armenian exports. Turning again to Figure 6.1, the gravity model results suggest that this norm should be between 30 and 40 percent of GDP (*i.e.*, 29.7 percent or 25 percent plus 10 percent), which still places Armenia among the worst third of the nations of the Former Soviet Union. On the other hand, the 30 percent under-exporting estimate from the trade openness model would move the norm to between 50 and 60 percent of GDP, in the middle of the top third of the CIS countries. I submit that the latter is far more realistic.

XII. FINAL REMARKS

I have argued that Freinkman et al.:

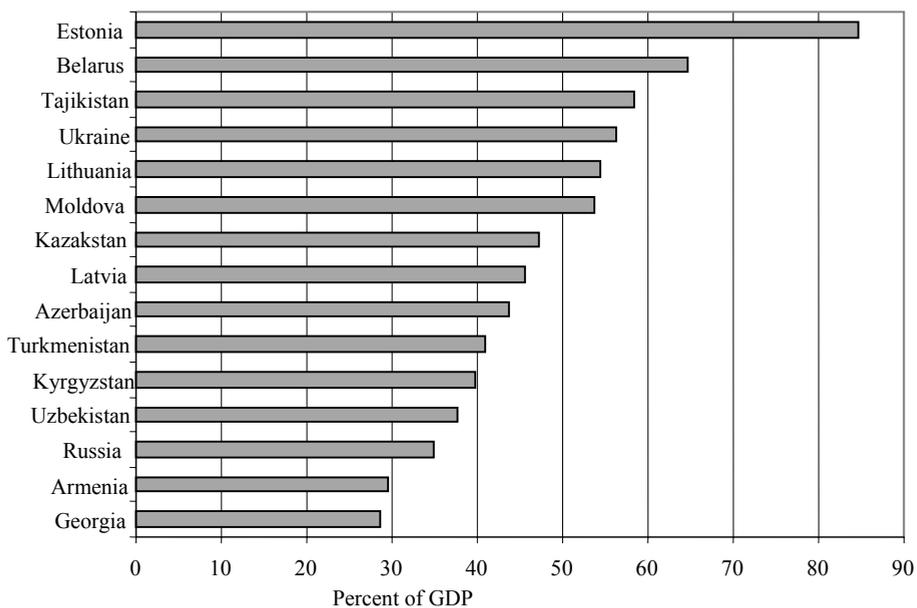
1. Despite acknowledging the preeminence of indirect over direct costs associated with the blockade, based their assessments of the size and trends in blockade-related costs solely on direct costs;

2. Failed to note two important aspects of indirect costs, namely the blockade’s impact on out-migration and that international crises are conducive to authoritarianism and opaqueness in government and, hence, to poor business environments; and
3. Employed two approaches for estimating lost exports and selected the one indicating relatively low losses despite its serious problems.

Rather than correcting the commonly held exaggerated view of the blockade’s cost on the Armenian economy, as was their intent, Frankel et al.’s work worsens the commonly held underestimation of those costs. The unpleasant reality is that the blockade’s effects pervade the economy and are profoundly negative. Moreover, there is always the risk of heightened tensions or even renewed conflicts which could unravel Armenia’s progress to date.

In closing, it should be stressed that this critique was not intended as a judgment that

Figure 6.1. Exports as Percent of GDP, Former Soviet Union, 2002



Source: World Bank, 2004b

Armenia should come to an accommodation with its neighbors about issues related to the blockade. That is a matter to be decided by the Armenian people. Rather, it was intended to provide a sounder basis for assessing the pros and cons of embarking on that difficult road.

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