Bijit Bora’s “The Quantification and Impact of Non-Tariff Measures” describes a “vast array” of measures that, although perhaps individually not important, when taken together as an aggregate, serve as “a significant barrier to trade.” While one would welcome some sense (however rough) of the extent to which the proliferation of NTMs described in the surveys has been within areas that are likely to fall under the purview of existing WTO processes/working groups, Bora makes the point well enough based on his taxonomy of what is known that the list is not complete and that the trade policy community does not, in fact, have a good handle on what is out there.

While providing a very nice survey of the state of knowledge concerning NTMs, the paper invites elaboration on two questions: Why the proliferation of NTMs? And what are the consequences of this proliferation? These questions lead to some conclusions that bear on the allocation of trade policy research in the coming years as well as on other policy areas that are affected by trade.

Why the proliferation of NTMs?

The apparently explosive growth of NTMs in the last several decades occurred at a time of powerful growth of trade, well in advance of global GDP growth. Trade policy undoubtedly had something to do with this record, alongside the technological forces that have driven globalization (reduction of costs of transportation and communication, etc.). During this period, governments were enthusiastically “talking the talk” of trade liberalization. And based on the broad success in concluding multilateral trade rounds and several large and on balance trade-creating regional trade agreements, governments were also to some extent “walking the walk”.

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2 Ibid, p. 1
So one might well ask, why the counter current of NTM proliferation? Bora does not really address this question, offering only the observation that “National governments have always been able to discover and implement new and sometimes ingenious ways to reduce the volume and value of trade.” 3 In this context, the flourishing of NTMs is described as “not surprising”.4

Governments do indeed from time to time respond to pressures on the economy and squeaky wheels do get their grease. Insofar as these pressures derive from stronger import competition (driven by technological change, product innovation, or improved economic performance abroad), the economic logic of trade should work as a strong countervailing pressure on governments to help them resist yielding to domestic calls for protection—not least because governments can be under no illusion that, in such circumstances, the need for protection usually does not go away, as vested interests are created along with the rents that protection generates. The disciplines of the multilateral system should help put steel in the backbones of governments in facing such domestic calls for protection.

Of course, insofar as the trade disciplines are found to be inadequate, then there is work cut out for future trade negotiations. For example, loopholes in the existing trade laws may facilitate giving in to lobby pressures for protection, and procedures governing trade disciplines—especially trade remedy mechanisms—may allow for “gaming” of the rules to buy time for industries under external competitive pressure, which some countries argue amounts to “procedural protectionism”.

Importantly, insofar as NTMs might be emerging because tariffs have been brought under trade disciplines, we might have the perverse result of protection shifting from a form that can be considered “efficient protection” into a category that can be described as “inefficient protection”.5 The distinction here is that instruments such as tariffs are transparent and predictable, are subject to international disciplines, and have fewer and less deleterious welfare effects than many non-tariff measures (e.g., tariffs create transfer payments that become tax receipts which can be used for public purposes; by contrast, regulatory requirements that raise rivals’ costs simply create deadweight losses through expensive compliance procedures). Categorizing and measuring NTMs provides the basis for policy change to counter any such trend—this presupposes, of course, that they are not already subject to study/negotiation in one context or another (e.g., standards, trade facilitation, government procurement etc.).

And, inter alia, having this information would strengthen the case for further liberalization which needs to be made anew not only to the general public, but also within governments of economies that are already highly open (when openness is measured by the height of tariff walls)

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3 The point is echoed in the summary of the work of Deardorff and Stern on NTMs which concludes that most NTMs are put in place expressly to reduce imports. Ibid at p. 3.


5 For a discussion of this idea see Allan O. Sykes, “ ‘Efficient Protection’ Through WTO Rulemaking”, paper delivered at the conference Efficiency, Equity and Legitimacy: the Multilateral Trading System at the Millennium, Center for Business and Government, Harvard University, June 1-2, 2000, available online at www.ksg.harvard.edu/cbg/trade.
and that might accordingly be less inclined to spend the political capital needed to push forward to an ambitious result in the present round of multilateral negotiations.

The pressures to which governments respond do not always stem from trade, however. Various social, environmental, health and other policy domains actively churn out policy changes to address problems and issues of their own. Trade can get sideswiped. In these instances, we enter a gray zone where the legitimacy of non-trade concerns has to be recognized while pushing back hard enough such that policy frameworks settle on approaches that are transparent, based on objective scientific grounds where scientific issues are raised, and that are the least trade restrictive means of addressing the non-trade concerns. This too is a matter that provides good grist for the trade policy mill.

So far so good and well understood.

But there is a third source of pressures that is given too little heed these days. As Bora emphasizes in his discussion of the definition of an NTM, trade should equalize prices for a particular good such that, taking into account differences due to transportation and other unavoidable factors, the “law of one price” should hold. NTMs that drive a wedge between local prices and the price that would prevail under the law of one price are then a source of price distortion and consequently of economic inefficiency.6

But implicit in the law of one price is that exchange rates are at equilibrium. If exchange rates are persistently wandering far from equilibrium over extended periods of time, then what is the price for a particular good that would prevail under the law of one price? The short answer is that it would be one that prevails nowhere at any time in the real world—perhaps it is some weighted average of the disequilibrium prices in the various national economies in which the good is bought and sold. But it would certainly not be a price that a trader would recognize. And the effect of an NTM on a national price under these circumstances is therefore indeterminate in classical efficiency terms.

Insofar as the inventiveness of governments in devising NTMs to relieve pressures on national economies stems from this source, we enter a different kind of gray zone—a world in which the prevailing law is that of the “second best”.7 In this world, it is not clear whether NTMs are “bads” or are simply offsetting other “bads”.

Casual empiricism suggests that at least some of the proliferating NTMs were prompted by disequilibrium conditions. One tends not, after all, to see countries with undervalued exchange rates being accused of introducing NTMs to block imports.

Accordingly, the first question posed above (“Why have NTMs proliferated?”) seems to matter quite a bit in terms of how the trade policy community responds to them. And, if an important

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reason for NTM proliferation is lack of “coherence” between the systems of international trade and international finance, what is needed is a rather more general discussion—recalling for example the discussion agenda of the Functioning of the GATT System (FOGS) working group during the Uruguay Round.

**Some consequences of proliferating NTMs**

Three consequences of particular significance flowing from the proliferation of NTMs are highlighted in the literature reviewed by Bora. First, the overall level of trade is lower than it optimally would be. Second, internationally prices are not at the levels dictated by the law of one price. Third, the elasticity of trade flows to price changes is dampened. The first two points are basic to the economist’s rationale for trade, namely increasing efficiency, and need no elaboration here.

The last point, namely the dampened responsiveness of trade flows to price changes, is of interest on at least three accounts.

First, it may be observed that today’s global economy has external imbalances of unprecedented size in absolute terms. It tries to resolve these imbalances through exchange rate flexibility. At the same time, it is commonly observed that exchange rates tend to overshoot as the adjustment process unfolds. A dampening of trade elasticities would logically work to slow/weaken the adjustment of external imbalances. Accordingly, imbalances would persist for longer and reach larger dimensions and the exchange rate swings needed to correct those imbalances would have greater amplitude. Turning the argument around, increasing the responsiveness of trade flows

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8 The extent of movement of real exchange rates, which is the major issue for the trading system posed by the system of international finance, is at the heart of three puzzles: (a) whereas the theory of the floating rate system is that nominal exchange rates adjust to offset inflation differentials and thus keep real exchange rates stable (subject to secular trends in the real economy that warrant changes in the real exchange rate), in reality nominal and real exchange rate movements are highly correlated—as for example has been the case with the recent euro depreciation/appreciation cycle against the dollar in a climate of stable low inflation; (b) the purchasing power parity (PPP) “persistence” problem is posed by the fact that the speed of reversion to PPP values is very slow (as a stylized fact, the “half life” of such reversion is 4-5 years), much slower than a globalized capital market would lead one to expect; and (c) whereas the theory of “multiple equilibria”, in the context of second generation crisis models, justifies attacks on exchange rates on the basis that the market correctly anticipates future inflationary policies, the emerging markets that have been attacked on this basis have not in fact behaved in accordance with theoretical expectations, meaning that the large devaluations forced by financial markets have been largely real deprecations. For a summary of the key facts bearing on the question of coherence between the systems of trade and finance, and sources concerning the conundrums cited see Dan Ciuriak, “Trade and Exchange Rate Regime Coherence: Implications for Integration in the Americas”, The Estey Centre Journal of International Law and Trade Policy, Volume 3 Number 2, 2002:256-274.

9 In theoretical terms, dampened price elasticities of trade flows and external balance adjustments are linked through the Marshall-Lerner Condition which states that, if longer-run import and export price elasticities sum to greater than one, an appreciation (depreciation) weakens (strengthens) the external balance.

10 In a dynamic context, an initial proliferation of NTMs to offset exchange rate-induced pressures might perpetuate the external imbalances and thus set the stage for still further growth in such NTMs—in short a self-perpetuating negative dynamic that could intensify beggar-thy-neighbor trade policy reactions to the imbalances that trade policy reactions helped to create in the first place
to prices would cause more rapid external adjustment and reduce the chance of large imbalances arising in the first place. Without going so far as to make judgments concerning the quantitative significance of NTMs in the current problems of global adjustment, a proliferation of such measures might well be a contributing factor.11

Second, a slower response of trade flows to prices is effectively the same as a reduction in similarity of domestic and foreign goods and services (i.e., there is an implicit reduction of the cross-price elasticity of imports vis-à-vis domestically produced goods). In turn, this means that price competition from imports is lower than it otherwise would be. NTMs that reduce the elasticity of imports thus not only convey protection to domestic producers from imports, they create increased monopolistic pricing power domestically, with implications for domestic policy. For example, in response to trade liberalization, governments appear to have been willing to see greater domestic industrial consolidation in the belief this would promote export competitiveness, implicitly counting on competition in the domestic market being provided by trade. But if proliferating NTMs reduce the competition flowing from trade, we get the worst of all worlds—limited domestic competition and ineffective trade competition. This is perhaps one of the sources of the civil society response to globalization which targets growing corporate power.

Third, insofar as the gains from trade liberalization derive from the responsiveness of imports to changes in relative prices through tariff reductions, a dampened price response will lead to disappointing results from trade liberalization compared to expectations which are calibrated according to assumed stronger responses.

Conclusions

To summarize, some five conclusions may be drawn from Bijit Bora’s analysis as to why it is important to make the attempt to gain a better understanding of, and to better measure, NTMs, notwithstanding the difficulties faced in doing a perfect job.

First, categorizing and measuring NTMs provides the basis for policy change to counter any trend to NTMs popping up as “inefficient protection” to replace the relatively more “efficient” protection conferred by tariffs—in other words, it would give trade negotiators something concrete to shoot at, over and above what they now have in their sights under mandates in the various WTO negotiating/working groups. By the same token, given the fact that the various Singapore Issues (competition policy, investment, government procurement and trade

11 An important test case as to the potential quantitative significance of this proposition might be provided by the slow adjustment of Japan’s external balance between 1985 and 1995 in response to the phenomenal appreciation of the yen over that period. In prior episodes of yen appreciation following the breakdown of the Bretton Woods system, oil price shocks served to swing Japan’s external balance into deficit; in each case, the yen subsequently fell back to more comfortable levels for Japan and Japan continued its trade-led growth path. By contrast the post-Plaza Accord appreciation of the yen was not attenuated by a swing into external deficit. The persistence of Japan’s external surpluses was regarded in some quarters as due to non-tariff measures used to slow imports—this, for example, was the rationale behind the US Structural Impediments Initiative of the last 1980s. Since all previous historical evidence suggested that Japan’s trade elasticities more than met the Marshall-Lerner Condition, there appears to be a *prima facie* case for further investigation along these lines.
facilitation) likely cover a good number of the types of NTMs that have been identified,\textsuperscript{12} moving forward on some or all could perhaps slow the growth and/or partly rollback the existing stock of NTMs.

Second, given past success in reducing average tariffs in the industrialized world to essentially \textit{de minimis} levels, with remaining areas of significant tariff protection in the industrialized countries relatively few but typically “sensitive”, the focus for further trade liberalization is increasingly based on non-tariff issues; the case for a higher level of ambition on the part of the industrialized countries (which is needed as a quid pro quo for engagement by the developing countries where traditional tariff protection is still high) would be strengthened if it can be demonstrated that the protection has migrated elsewhere in the system.

Third, there are important ancillary domestic policy implications from an NTM-induced dampening of responsiveness of imports to tariff changes, in particular regarding the erosion of the effectiveness of trade in disciplining domestic competition.

Fourth, insofar as NTMs are slowing the response of trade to change in prices, J-curves will be longer and deeper; by the same token, one would expect greater amplitude of the real exchange rate swings needed to drive adjustment of external imbalances. Meanwhile, insofar as NTMs are in the first place prompted by disequilibrium conditions in international financial markets, we have the makings for a vicious circle. Insofar as this effect is quantitatively important, a broader dialogue on trade-finance coherence is required.

Fifth, a proliferation of NTMs might, by dampening trade responsiveness to prices, invalidate the econometric estimates of gains from trade in the Doha Development Agenda or in regional agreements. There are accordingly analytical implications of proliferating NTMs.

\textsuperscript{12} For example, competition and investment-related issues are important parts of the taxonomy of NTMs developed by Deardorff and Stern; government procurement and trade facilitation might well catch many more actual or potential NTMs.