

Game of Trade: A Portfolio Approach to Theorizing on Trade and Investment as Entangled Domains

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Abstract¹

Foreign trade could be a special form of the more generalized and hybrid decision-making, with “strategic protectionism” straddling (and reaching beyond) the dichotomy of positive versus normative. A new trade theory or social-planning paradigm is proposed merging portfolio- and game-theoretic accounts as applying on every level and augmentable for long-run strategic implications.

Normative versus Positive: Plea Bargaining Does Not Make for Precedence

These days, the Western judicial system has seen an assault on the conventional wisdom which has thus far held that the Inquisition ways are long past. Not quite so, as the courts have by and large focused on garnering neatly crafted plea bargains as an assault on maverick whistle-blowers, and the mainstream scientific method deploys the inquisitorial criteria of testing one’s allegiance and loyalty. This, for one, resembles E.B. White’s punchline back in the McCarthy era, with naturalization swear-in formulas prompting one to disavow any belief in “atheism, Communist, or anything like that.” It may have gotten even worse these days, as witchhunts are being institutionalized as part of axiomatization, with assumptions and “all else held equal” taken *prima facie* and almost accepted as uncontested “evidence.”

If you challenge this idol, you might still live up to democratic and post-modern premises—ironically those being downright denied as one way around Russell’s liar paradox and “anything like that.” Indeed, why would a system challenge its own substance (be it democracy, post-modernity, scientific method, or economics paradigms), even as it amounts to, or induces, its own existential threats as stemming from its own abuse of monopolistic say? Unless you repent and accept a plea bargain, you might end up outside of the mainstream—and possibly be “beatified” some day, should your “jail break” prove a success.

¹ This paper is “quadrenial” in that it is dedicated to the four Alyonas that have somehow marked my life, with a special appreciation going to Alyona K. and her mom Ludmila, great friends of our family’s and a big part of my happy childhood and youth still enthusing and inspiring my life.

In any event, whereas the Inquisitorial scrutiny would have given you a chance—e.g. weighting witness testimony by impartiality scores or even counting your “*in modo disputandum*” compliance as the reasonable doubt threshold—you would hardly get away “like that,” inasmuch as a single anonymous peer reviewer turns their table on you, with second thoughts and plans on your strand of research in mind.

In neoclassical economic theory, the normative is by and large treated as “bad” with all things “good” accruing to whichever is crushed indiscriminately into the “positive” aggregate. This *Shall* versus *Is* divide may turn rather whimsical, however, when applied to mainstream flagship venues or pillars of faith, trade theory not least. Trade is good, and protectionism is bad—you will keep reciting this mantra until you lose the point of it all and the nerve of the zest that has turned the [hypothetical] once-positive demonstration into a grand set of normative, one-size-fits-all policy and geopolitics implications. Protectionism is bad, planning is bad, irrationality is bad, inefficiency is bad—see just how squarely the former normatives have blended into the undeniably valid latter positives?

But then, if planning is that “bad” at the *macro*-level, why have companies of all sizes indulged in it increasingly over the past few decades, amid the largest semi-planned economy thriving alongside the rest of the strategically protected Southeast Asians? For the same token, why did this bandwagon get the vast majority of the western economies hooked on policy and strategic *targeting*—as is evident in the budgeting projections and posterior macro-data time series alike? If trade (be it comparative advantage or scale returns based), in line with arbitrage or Pareto slack picking as well as CAPM diversifying, is one ultimate efficiency booster, can’t *minor* efficiency slacks be more than offset with major *productivity* boosts—as when the frontier shifts? And if allocation efficiency counts that heavily, why has the sustainability issue—e.g. resource sufficiency and adverse-externality spillovers in a cross-stakeholder or inter-generational setup—only been raised recently, without ever being accounted-for explicitly in analyst following and stock prices? Does the latter pertain to *bounded* rationality, information cost, structural uncertainty as magnified by inadequate models, or just that—risk taking as a heuristic means of leaving rationality idle? If this is what the mainstream paradigm has maintained as necessary and sufficient, what else would be needed to question this meta-performance criterion in the first place, in light of the mediocre sustainability record?

The mainstream physics, with every rigor advanced to capture a meager 4% to 5% of the lower-level matter, can afford thriving on that which suffices to keep the smart phones going. It remains to be seen whether the *social* sciences, with their 5% to 50% *R*-squares amid strong yet manipulable *p*-values and power tests, have amounted to a grand source of structural uncertainty and sheer waste of resources in their own right—for all the inquisitorial zeal and hand-waving extended on the infidels.

Trade Theory: Outrageously Simple

One horrifying starting point would be to suggest that the positive as opposed to normative are less than separable anywhere near the *optimal* values or states. The same goes for allocation versus distribution as distinct yet intertwined domains. One may decide that the latter is irrelevant to the former or can alternatively be ensured at any stage—exogenously or depending on the bargaining power or relative property rights (whose arbitrary status is maintained as sacrosanct in neoinstitutional symbol of creed, as long as one can be enforced at low enough transaction costs). One may furthermore take the liberty of [not] checking into the relevance of the proposed [enforcement] criterion, perhaps by supplying models and running a million regressions or an umpteen of specifications yielding a high enough Cronbach's alpha. However, as long as those less well-off exhibit a far higher marginal utility (appearing as the Lagrange multiplier in micro- and higher potential propensity to spend and consume in macro-setups), why not embark on the obviously more potent policy multipliers?

I now expost a simple and coherent trade theory that bypasses the grand divide yet not the burning issues. To begin with, whereas in good or favorable “states of nature” the payoffs (as well as technology maps) could reveal either superior means or more compressed distributions or both, either or both could be reversed in adverse states. While these may or may not match the accuracy of what-if analyses or scenario sensitivity in corporate planning, it should appear plausible that trade could be seen as a *risky tool* showing a higher expected value amidst as much more scattered possibilities or greater structural uncertainty. By contrast, autarky could be driven by either higher *risk aversion* or a more *restricted choice* set, or both.

Incidentally, this suggests that trade is *neither good nor bad*—this normative divide might be of low to no relevance in light of this grand vehicle amounting to either a kind of *leverage* or a *securitization* tool working either way. Unless the expected payoff, as accruing to free trade or exposure, is higher than otherwise, no *rational* decision maker or social planner is expected to opt for openness—not even unless the favorable gap is *materially* large, so as to absorb all conceivable hidden costs or risks collapsed into regression residuals.

At this rate, the choice of trade versus autarky could be seen as *investment*—indeed formalized along *portfolio*-theoretic lines and with CAPM criteria (no excessive or diversifiable risks attached with reasonable compensation). Since risk preference profiles count additionally as the choice of a particular Markowitzan portfolio (a tangency point between the utility function and the efficiency or Sharpe frontier), no one can arbitrarily be told to tap into the riskier option (e.g. free trade or utmost openness) unless it fully fits with one's level of risk aversion or seeking as a rational investor. A surgery on one's preference cannot be prescribed as a positive option, and nor has it been motivated normatively with sufficiency as well as necessity.

The equivalent representation could amount to a *game*-theoretic setup, with the rational principal player (or social planner acting as an agent) choosing a mix against one's own production system (or otherwise global setup) acting as a *chance player* in setting the states distributions (alongside the technology maps as per structural uncertainty). Again, the

optimal choice may or may not reduce to a pure strategy or corner case, yet in any event it should be well-defined structurally, with mixing possibly interpreted as either an averaging over a variety of principal stakeholders or a long-term trend².

Note that this is not to suggest that autarky could be a blessing—unless one knows full well how to “talk” one’s own frontier into a well-behaved pattern³. More specifically, allocation rationality as well as efficiency would *concur* in staying indifferent or put between trading with one’s own production system (or frontier of opportunity) versus the rest of the world. As long as the marginal rate of substitution or technical transformation matches the terms of trade, *weak gradiency* is there.

Stronger Than Normative—Constructed Evidence More Than Binding

However, own system could reasonably prove far more *controllable* as well as *augmentable* over the *long* haul, compared with the global or exogenously imposed terms of trade. As long as tradeoffs can be exercised in a more programmable manner, this could serve as grounds and basis for “strategic protectionism”—aimed at *shifting* the opportunity frontier or the very *quality* of game—as one alternative to autarky and passive (acceptive of exogenously imposed comparative advantage) trade alike.

At this rate, the other player is no longer a chance type, and its strategy *converges* to that of the [key] player, while amounting (as grand technology mapping) to the very game structure. It should become evident that this does not boil down to *conventional optimization*—be it naïve equimarginal conditions seeking optimal values or variations designs garnering functional-equation type solutions (possibly powered by Ito calculus). In any event, whereas in the *short* run a *regular* portfolio and game metaphor applies (with the policy maker passively accepting or acting upon the terms and tradeoffs being imposed exogenously), this may transform to a very different nature of *constructing* the reality, as long as the social planner raises the courage to exercise *meta*-choices that render irrelevant any structural uncertainty alongside the questionable premises underlying its simplified calculus.

Further Research: Shifting Frontiers on the Frontiers Being Shifted

Some of the proposed paradigm shift may have come in line with business administration theorizing, amid the strands of the applicable recent literature being as diverse as “causation versus effectuation” (Sarasvathy, 2001), “blue ocean strategy” (Kim & Mauborgne, 2005), and “creating shared value” (Porter & Kramer, 2011), to name but a few. That said, the present theory builds on my research dating as far back as 1994, and is all-

² Or a “multiverse” for those keen to abide by the more arcane premises of the modern physics and math reasoning (and not too wary of whether this could buy them a re-election as CEO or President—indeed the less risk averse yet provisionally hyper-rational types).

³ If one were to keep embarking on abstract phenomenology again

endogenous and unrelated to those mentioned above by definition⁴. The forthcoming extensions could be seen as both generalizing and bridging as applications, with the *rho*-parametric approach reconciling noncooperative and cooperative setups while positing a *varying* role for the chance player.

References

- Kim, W., & Mauborgne, R. (2005). Blue ocean strategy: From theory to practice. *California Management Review*, 47(3), 105-121
- Porter, M., & Kramer, M. (2011). Creating shared value: How to reinvent capitalism and unleash a wave of innovation and growth. *Harvard Business Review*, Jan/Feb, 63-77
- Sarasvathy, S. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *The Academy of Management Review*, 26(2), 243-263

⁴ The core of it, or perhaps the exposition in its entirety, was part of my first term paper as presented in June 1995 at the Chernivtsi State University, and further elaborated during a November 1997 conference in Lviv, with the report title being *Strategic Protectionism as Boon: The Asian Miracle Questioning the Convention*. The careful reader will appreciate that, not only do those other works focus on *micro*-level setups (with mine straddling the levels consistently), they embark on rather differential premises. That said, my further extensions will make heavy use of the Orduality-Residuality-Gradiency (ORG) paradigm with some implications appearing akin to those being proposed by the aforementioned papers. This match is all the more remarkable, given that the ORG paradigm likewise preceded those findings while applying across a plethora of disciplines.