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SYSTEMIC ANALYSIS OF TRADE LIBERALISATION: POLICY ENTREPRENEURSHIP AND BEHAVIOURAL VARIABLES IN A TWO-LEVEL GAME FRAMEWORK

ABSTRACT
This paper presents a synthetic framework for the analysis of bilateral trade liberalisation process. It extends usual two-level game model (allowing interplay between domestic trade policy and GATT/WTO negotiation), and incorporates policy entrepreneurship processes (leadership, recombination, consensus-building), behavioural variables (intensity of interest in policy issue, attitudes towards gains and losses and cooperation), as well as systemic forces behind protectionist policies. The factors that determine the path, timing and outcome of the trade policy negotiation are tied in a formal model. The results point to the complementarity and mutual dependence of the factors, and the necessity to simultaneously attend to them during negotiation process. We also show that the success of trade liberalisation hinges upon readiness of the policy system for reform and prior exercise of advocacy and consensus building.

Keywords: Policy Entrepreneurship, Two-Level Games, Trade Policy
JEL Classification: C70, F13, F51, L26

RIASSUNTO
Un’analisi sistemica della liberalizzazione del commercio: politica imprenditoriale e variabili comportamentali in un modello di giochi a due livelli

Questo studio propone un modello sintetico per l'analisi del processo bilaterale di liberalizzazione del commercio. Estende il modello dei giochi a due livelli (consentendo l’interazione tra politiche di commercio interno e negoziazioni GATT/WTO) e incorpora i processi imprenditoriali (leadership, ricombinazione, ricerca del consenso), variabili di comportamento (livello di interesse verso i problemi politici, attitudine verso i guadagni o le perdite e la cooperazione), così come forze sistemiche al di là delle politiche protezioniste. I
fattori che determinano il percorso, la tempistica e il risultato delle negoziazioni commerciali sono collegati in un modello formale. I risultati indicano che i fattori sono complementari e dipendenti uno dall’altro e che è necessario prenderli in considerazione simultaneamente durante il processo di negoziazione. Vi sono inoltre evidenze che il successo della liberalizzazione del commercio dipende dalla prontezza del sistema politico ad effettuare riforme, ad esercitare azioni di difesa e di ricerca del consenso.

1. INTRODUCTION

The issue of international trade liberalisation received considerable attention in economics and political science. The relevant literature identifies several factors that may enable (or in contrast, hamper) trade liberalisation: exogenous economic factors, such as crises as well as long-term structural shifts (Gourevitch, 1986; Rodrik, 1992); configuration of organised interest groups and the strength of pro-liberalisation or protectionist lobbying (Hiscox, 2002; Woll, 2006); institutional rules and constraints, both at domestic and GATT/WTO level (Moser, 1989; Parisi, 1998; Herrmann-Pillath, 2006); the decision making procedures within the government and respective international organisations (Murphy, 1990; Pollack, 1997); international position and power of the countries taking part in liberalisation process (Wiener, 1995).

With these factors undoubtedly being salient and important in determining the outcomes of trade liberalisation, the agency and processual complexities of trade negotiations are equally salient. It may be argued that whilst above-mentioned factors create preconditions for free-trade agreement, the timing and the substance of the free trade agreement are determined through negotiation. The purpose of this paper is to propose a synthetic framework of international trade liberalisation that is based on policy entrepreneurship (as a major agency factor) and also includes institutional and behavioural variables that provide context for policy entrepreneurship.
2. **Principal Elements of Trade Liberalisation Framework**

2.1 *Two-level Games*

The basic structure of the framework follows two-level game models developed by Schelling (1960) and Putnam (1988), and applied in a variety of fields including international trade (Barrett, 2003; Grossman and Helpman, 1995; Milner and Rosendorff, 1996; Gibson, 2003).

As put by Milner (1997), two-level games point to the following phenomena associated with negotiations. Firstly, payoffs and preferences in international negotiations are to the large extent determined by domestic political factors. Secondly, strategies at the international negotiation are not stable; instead, they change together with the changes in the composition of the government and positions of the domestic actors. Thirdly, the overall power of one of the parties in negotiation does not guarantee a favourable outcome. Finally, the outcome of the international negotiation is not guaranteed; in contrast, the vast number of negotiation failures is attributed to domestic stalemates.

In two-level games, domestic political constraints (mostly associated with post-negotiation ratification of agreements in domestic legislatures) become salient for trade liberalisation outcome. Factors that affect domestic ratification include firstly, the domestic institutional structure, that allows (or prevents) easy passage of the agreement concluded at the international table, and secondly, the presence of domestic constituents that are opposed (or are in favour) of the agreement. In other words, at the domestic level, the representation of interests in the decision-making system becomes important. These domestic constraints determine the win-set, defined as a set of all possible international agreements. Respectively, if the win-sets of the participants in the negotiations overlap, a mutually advantageous agreement becomes possible. Indeed, a small win-set may be a negotiating advantage, since the party with the smaller win-set will have smaller incentives to concede, as its concessions will not be ratified (“Schelling conjecture”).

While retaining the basic structure of the two-level game models\(^1\), it is advantageous to represent domestic-international negotiation as an ongoing, complex and indeterminate undertaking with simultaneous interactions across parties and levels, behavioural shifts and

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\(^1\) The paper specifically relies on and extends the two-level game model developed by Gibson (2003).
institutional changes, rather than a simple two-stage (international negotiation-domestic ratification) process. In this connection, entrepreneurship factor comes to fore.

2.2 Policy Entrepreneurship

The policy entrepreneurship in the proposed framework is based on classical concepts of economic entrepreneurship, devised by Kirzner (1997) and Schumpeter (1939, 1942/1987). In contrast to political entrepreneurship (Wohlgemuth, 2000; François, 2003), it relates to formulation and advancement of policy proposals, rather than competition for votes in political arena.

In line with original theorizing by Kirzner, we consider that the function of Kirznerian policy entrepreneur during negotiation process is that of coordination and facilitation: (1) advocacy in favour of liberalisation, bridging positions, removal or moderation of toxic proposals and (2) utilisation of the whole arsenal of strategic and tactical means to foster the negotiation process in order to achieve a free trade policy. This role is similar to the role of Kirznerian economic entrepreneur, conducting arbitrage activities, eliminating market disequilibria and making market work smoothly (it can be argued that absence of durable trade liberalisation agreement is akin to market disequilibrium).

The application of Schumpeterian entrepreneurship to trade policy includes two types of policy entrepreneurs (Mark I and Mark II). Mark I entrepreneurship is political leadership in a particular policy domain. It is typically exercised by top national decision makers. These are the actors who in normal conditions are not involved in particular trade issues but delegate authority to the lower level of bureaucracy. At certain points, when divisions between pro- and anti-reform actors widen and the reform is delayed, top policymakers may decide to intervene into the political wrangle, make crucial decisions themselves and thus bring reform into existence. Mark II entrepreneurship is incremental policy innovation. Schumpeter (1939) in his later works raised the possibility of innovation by tinkering, recombination, incrementalism and collective entrepreneurship (in contrast to early idea of heroic-style radical innovation). In trade policy setting, this would involve construction of agreement from available proposals, submission of proposals of varying quality, expert work and the like.
The above policy entrepreneurship functions are exercised both during agenda-setting and actual negotiation (the former aspect requires separate examination).

3. BUILDING THE FRAMEWORK

3.1 Schumpeter Mark II Policy Entrepreneurship

During international trade talks Schumpeter Mark II policy entrepreneurs build from bits and pieces of their own and other negotiators’ proposals some agreement that could resolve international trade policy contradictions (stemming from inconsistencies in trade policy rules or their absence).

Non-entrepreneurial (routine) approach to negotiations typically involves following. Firstly, negotiators behaving routinely frequently attempt to embrace all issues and variables at once. Secondly, routine negotiators are usually influenced by some divisive trade conflicts and problems that preceded negotiation and react by attempting to solve these conflicts first, although it might have been preferable to concentrate on other less “toxic” issues. Thirdly, routine negotiators are unable to extend their decision-making horizons to see how the agreement would look as a whole.

In contrast, Schumpeterian Mark II incremental and recombinant entrepreneurship rests on Schumpeter’s view of entrepreneur as a person that has

“intuition, the capacity of seeing things in a way which afterwards proves to be true”.

This, in negotiation context, involves ability to foresee how “good” agreement will look like, to break complexity of the issue into workable and manageable parts, prioritise issues, depending on their potential to block negotiation (least obstructive first, most obstructive last), understand appropriateness of certain demands and readiness of parties to make concessions, and balance economics theory requirements with political constraints².

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² While “good” agreement necessarily is the one that prioritizes regulation of trade instruments (outlaws most distorting, regulates less distorting, and permits the least distorting), “good/successful” Mark II entrepreneurship implies that it is necessary at some point during talks to avoid making proposals, outlawing certain sensitive instruments in order not to fail the talks. Indeed the stalemate in the early years of the Uruguay Round was due to the lack of recognition of this fact (the absence of Mark II entrepreneurship).
Trade policy history shows that the lack of this incremental and tepid policy entrepreneurship was responsible for liberalization failures, as was the case with US International Trade Organisation (ITO) initiative in 1940s that was imposed on other parties as a single package, and that was not seen appropriate by the rest of the world given post-war economic and political conditions.

**Proposition 1.** We hypothesize that Schumpeter Mark II entrepreneurship most of the time is not up to the task. Most GATT/WTO rounds were opened in a non-imaginative, “routine” fashion, with the most recent divisive trade problems occupying the agenda and dictating particular treatment of other issues, thereby substantially decreasing the possibility of a qualitative breakthrough.

**Proposition 2.** Ability to rise above the routine is usually not held by countries’ representatives, but requires intervention by some outsider (e.g. GATT/WTO bureaucrat), prioritizing and managing the components of proposals submitted by countries’ representatives.

3.2 Kirznerian Policy Entrepreneurship – Advocacy, Consensus-Building and Facilitation

The essence of Kirznerian consensus-building and advocacy (and thus facilitation of talks) at domestic level is formation of the coalition of like-minded pro-liberalisation actors. The motivation behind the process is different from usual lobbying: Kirznerian domestic consensus building involves value and ideology-based lobbying, i.e. the logic of action is not to maximise the group’s welfare but to foster changes in the policy system by changing the stance of other groups and by obtaining a shared frame/understanding (Lee and Chang, 2010).

Hutter (1986) mentions a specific example of successful persuasion and consensus building that led to patent law formation in Italy in the 1960s: the quite unremarkable discussion between political factions (described by Hutter as a dialogue in “conversation circles”) was prominent in releasing knowledge constraints, supplying alternative views on the problem and changing long entrenched opposition to patent legislation, eventually leading to policy adoption. Kuran (1988) likewise clarifies why this “non-political” mechanism of influence (i.e. without recourse to political power and power-based strategies) is potent: despite collective inertia that is based on and reinforced by rooted beliefs and policy views, many of which are strong, emotionally

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3 Kirznerian entrepreneurship is also exercised at international arena, e.g. by GATT/WTO directors, bridging positions of the parties, facilitating talks and helping resolve conflicts.
coloured and religion-like (Meier and Durrer, 1992), the infusion of alternative information and views may substantially change the collective position on a particular issue. Kuran argues that due to “critical mass” effect, once a sufficient number of alternative views are introduced into the system, the change in preferences may become quick and unstoppable.

Clearly, it is not inevitable that anti-liberalisation agencies and bureaucrats would willingly concede to pro-liberalisation ones without resistance (indeed, the anti-liberalisation sentiments in policy system may be too strong). Respectively, it would become necessary to recourse to non-political means to “change” and “reform” bureaucracy and agencies entrenched protectionism: to attempt altering the composition of the policy system by trying to appoint like-minded bureaucrats and induce change of culture within agency (Wallis, 2010); to depoliticize the policy issue; to avoid any criticisms of the normative core of the anti-reform faction’s belief system; to tackle some practical and pragmatic aspects of the policy.

**Proposition 3.** Pro-liberalisation activities usually start in some relatively small sub-sections of the domestic policy system. Provided that the intensity of persuasion is high enough, the critical mass point at which a relatively durable consensus is possible can be reached.

**Proposition 4.** We argue that the potency and impact of Kirznerian advocacy and consensus building (and its various tactics and means) is largely conditioned by its intensity and the amount of effort that entrepreneurs make. It is also conditioned by entrepreneurial effectiveness, defined as the ability of entrepreneurs (the pro-reform faction) to “reform bureaucracy”.

### 3.3 Behavioural Orientations

In contrast to negotiation over security issues (characterised by distrust and hostility behaviours), trade negotiations are typically mixed motive negotiations, involving competition and cooperation orientations. Walton and McKersie (1965) and De Dreu et al. (2000) distinguish integrative-type bargaining (parties attempt to minimise the distance between their interests and treat negotiation situations in “win-win” terms), and distributive-type bargaining (parties view the negotiation situation as a “win-lose” one with consequent reluctance to make concessions, concealment of information and standing firm on initial positions). The salience of the issue to the parties and the intensity of their involvement are also important. We consider four hypothetical cases.
Case 1. The party is interested in the issue, but not willing to cooperate. Equations 1 and 2 in Section 4 show that if the parameter \( \theta \), defined as the behavioural stance of negotiators \( i \) and \( k \) in bilateral negotiations, affects the willingness to cooperate of both parties (parameter \( \nu \)), in this first scenario it will take a negative value. If both parties have this distributive stance, the willingness to cooperate and the likelihood of cooperation are diminished significantly (the expression \( \theta_{EU} P_{US} + \theta_{US} P_{EU} \) is negative).

Case 2. Both negotiators are interested in the issue discussed, the intensity of involvement is high and both parties are willing to find integrative solutions. Thus \( \theta \) is positive and substantially greater than zero, and therefore the willingness to cooperate is maximised.

Case 3. The party is not particularly interested in the issue, but nonetheless sees some integrative potential. If both parties have this orientation, they will enter into negotiation and achieve some acceptable, though not the best possible, deal that will provide payoffs that are good enough for both. In this case, parameter \( \theta \) will be positive but not much above zero. The likelihood of cooperation and \( \nu \) will be high enough to conclude the negotiation, but the outcome will be inferior to that under the second scenario.

Case 4. The party’s intensity of involvement is low precisely because it expects high confrontation, demands from the opposite party to make concessions, and the inevitability of the negotiation’s breakdown once it starts. If both parties have this orientation, the size of parameter \( \theta \) is indeterminate and potentially negative (when parties become more heavily involved in the talks).

We therefore propose that:

**Proposition 5.** The intensity of the interest in the negotiated issue (high versus low) and the basic behavioural orientation of negotiators (integrative versus distributive) form four patterns of behaviour which influence the rate of concession making and a country’s willingness to cooperate. The highest likelihood of cooperation is associated with high interest in the issue and integrative orientation (maximum).
3.4 Behavioural Framing

A successful negotiation outcome is conditioned not only by the players’ willingness to cooperate and their positive attitudes towards cooperation ($\theta$), but also by how they value their existing payoffs.

Firstly, Kahneman and Tversky (1979) argue that gains and losses are evaluated with respect to an individual’s reference point. This point is different across individuals and it also varies over time. This is crucial for negotiations, as even in the presence of all necessary factors for cooperation (entrepreneurship and positive attitudes towards cooperation) negotiations frequently fail because of this changing behavioural parameter.

Secondly, losses are perceived more intensely and in more negative terms than gains. Thus, in a trade negotiation with two equally possible outcomes (gain and loss of similar magnitude), policy actors would be more concerned with and pay more attention to the possibility of loss.

Thirdly, it is assumed that the marginal value of gains decreases, whereas the marginal value of losses increases. Thus, players are more risk averse in making choices between gains and more risk seeking in making choices between losses. Also, the perception of change in value between gains is less than the perception of change between losses (loss aversion).

Respectively, we advance following proposition.

**Proposition 6.** The country in a gains frame will prefer to retain the status quo and the country in a losses frame will prefer to challenge it. The decision to enter negotiation is dictated by loss aversion, i.e. the country in the losses frame is more likely to initiate negotiation. The higher the loss (existing, as in the case of a country in a losses frame or potential as is the case of country in a gains frame), the more intense and frequent is the use of confrontational strategies and the higher is resistance to cooperation.

3.5 Relational Bargaining Power

We consider bargaining power variable as a relational and subjective concept. Actors reflect on their standing in relation with others and get a subjective understanding about their power position, which may diverge from their objective material capability.
The level of the bargaining power is thus determined in a relational context, through the exercise of influence and various strategic and tactical actions on the respective party to negotiation. The power (and respectively willingness and resistance to cooperate) vary over the course of negotiation.

The use of “naked” power is limited in trade negotiations. We argue that countries care about their future position and attempt to foresee it – they therefore make projections (expectations) about their material standing (material payoffs) in a relational context. The trade agreement, if concluded, could either increase or erode the power base of the country. If the country believes that the expected power \( \alpha^e \) is to be higher, it will be more willing to cooperate. Otherwise, it will resist cooperation. Putting this in the context of the US-EU bilateral relations, it implies that as the expected power of the US \( \alpha^e_{US} \) increases, the expected relative power of the EU \( (1 - \alpha^e_{US}) \) will decrease, thus putting pressure on the EU to resist cooperation (lower willingness to cooperate). In contrast, when the EU believes that its expected relative power will increase, its willingness to cooperate will be higher.

### 3.6 Kirznerian Policy Entrepreneurship – Strategic Influence

Apart from behavioural orientations, decision-making frames and expected relational power, there exists another mechanism of increasing the willingness to cooperate \( v \) of each negotiating party – manipulation of the size of its cooperation and status quo payoffs (\( \sigma \) and \( \sigma^{sq} \)), of the balance between the pro-change/pro-status quo political pressures and of the size of its domestic constraints. While behavioural parameters are usually less amenable to outside influence (Fischhoff, 1983: 104), the payoffs and domestic constraints may be manipulated by the strategic influence of the other party, thereby enhancing actual (rather than potential) power of the influencing party. We argue that strategic influence in many instances is a manifestation of Kirznerian entrepreneurship (in the sense that actors facilitate and coordinate negotiation by using various strategies and tactics that provide material inducements to counterparts and that manipulate their payoffs).

Following Schoppa (1997), we incorporate four synergistic strategies (strategies, targeted to modify preferences of domestic constituents in the opposing party to negotiation) – threats, reverberation, restructuring of domestic constraints, and tying hands.
Threats, used by the pro-liberalisation country, intend to put a brake on protectionist policies in the target country, and typically involve sending a credible signal (e.g. threat of economic sanctions or retaliation) to a target state that its future benefits in a specific negotiation area (or in all negotiation areas) will be decreased or annihilated. Whether threat is credible or legitimate depends on the relative strength of domestic pro- and contra-liberalisation coalitions in the target state (which in turn depend and result from Kirznerian advocacy and consensus building within target state).

Reverberation being a milder form of influence, attempts to bypass completely the opponent state negotiators and establish direct dialogue with the domestic constituents of the target country. The objective of reverberation is to find allies in the domestic trade policymaking system of the target country, and to initiate dialogue in integrative terms, i.e. present the benefits of the policy changes, advocated by the pro-liberalisation state. Reverberation strategy includes two principal tactics: participation expansion and reverberation of alternatives. The former involves mobilisation of active and goal-oriented new actors that were previously uninterested in the issue in question and that could help in changing the position of target state negotiators. The reverberation of alternatives involves discussions of the issue and deliberations with a specific emphasis on a lucrative-ness and benefits of alternative policies. Similarly to threats, the success of reverberation comes hand in hand with Kirznerian advocacy and consensus-building.

Restructuring of domestic constraints in the target country is a strategy intended to modify the balance of interests therein by making positive inducements (side payments) to the recalcitrant stakeholders in this country (Mayer, 1992). Thus, the objective is to foster the agreement by broadening negotiations by means of securing interlocking deals among negotiation areas/issues or among domestic stakeholders. The triangular relationships between Germany, France and the USA are illustrative in this sense. The United States’ demands are typically opposed by France, especially when it comes to agricultural issues. Germany is not normally an obstacle to US demands, as it favours free trade in many areas (especially in industrial exports). When industrial sector liberalization becomes impossible due to the lack of progress in agricultural negotiations, Germany becomes an internal ally of the United States. Side payments by Germany to France (e.g. in the form of compensation to French agricultural producers for
their losses, incurred from agricultural trade liberalization) would, in this situation, “repackage” US pressure and help Germany to overcome opposition in France.

Tying hands in Putnam’s original formulation intends to make the opposing negotiator believe that one’s own domestic conditions are tight and no further compromise is possible (i.e. that the win-set of the country is smaller than it actually is) and thereby make opposing the negotiator more pliant. Strategy may be performed domestically, when one stakeholder limits the freedom of manoeuvre (either ability to concede or ability to cling to its position) of other stakeholders or of the ultimate decision maker. Alternatively, it may be performed solely at the international table: one of the negotiators, may indicate that without agreement in one specific area no deal will be secured in other areas. In both cases, the costs of political action of a party at which the strategy is targeted are increased.

**Proposition 7.** The likelihood of changes in the initial position of the target state is higher, if synergistic strategies are accompanied by exercise of pro-liberalisation advocacy and consensus building.

**Proposition 8.** Pro-liberalisation pressure is likely to be most successful when key actors inside the target state are willing to amplify this pressure and compensate the veto players for the loss incurred by liberalization.

4. Game theoretic representation

4.1 Basic Setting

The formal model presented below ties together entrepreneurship and behavioural variables examined above. The model is constructed for two international players (USA and European Union), but can be extended to multilateral setting or used for any other two players. It is assumed that one party (USA) is interested in liberalisation, while in the other party (EU), some of the constituent countries are not.

The set of feasible payoffs (S) is defined. If parties come to an agreement, they will receive settlement in S; if there is no settlement, they will obtain BATNA (best alternative to negotiated agreement). This alternative represents the best available payoffs that parties would accept if negotiation fails, and conforms to the status quo situation before negotiations (in the model it is
denoted as $s_{EU}^{q}$ and $s_{US}^{q}$ for the EU and the US respectively). Consequently the task of each party would be to maximise the difference between the utility associated with the negotiated settlement and the no settlement utility $- U_{i}(s_{i}^{q})$ for party $i$. In the situation of interdependence, negotiated settlement comes from joint maximisation of utilities of both players $- (U_{i}(s_{i}^{q}))(U_{k}(s_{k}^{q}))$ for players $i$ and $k$.

We define the negotiation game as $G = (N, v, S)$, where $N = \{1, 2\}$ with Player 1 standing for the USA and Player 2 standing for the EU. $v = f(v_1, v_2)$ is defined as the cooperative outcome (e.g. trade policy agreement), and is a function of $v_1$ and $v_2$ – the US and EU willingness to cooperate. $S = \{\sigma_1, \sigma_2, \sigma_1^{q}, \sigma_2^{q}\}$ is the set of payoffs available to negotiators, where $\sigma_1$ and $\sigma_1^{q}$ are cooperative and status quo payoffs of the US and $\sigma_2$ and $\sigma_2^{q}$ are the respective payoffs of the EU.

The willingness-to-cooperate equation for each country takes the following general form.
Willingness to cooperate = (Factors increasing likelihood of cooperation * Size of cooperation payoffs) – (Valuation of status quo * Size of status quo payoffs)

For the US and EU the specific willingness to cooperate functions are set as:

$$v_{US} = A(\theta_{EU}p_{US} + \theta_{US}p_{EU})\sigma_{US} - \varphi_{US}\sigma_{US}^{q}$$ (1)

$$v_{EU} = A(\theta_{US}p_{EU} + \theta_{EU}p_{US})\sigma_{EU} - \varphi_{EU}\sigma_{EU}^{q}$$ (2)

Where $v_{US}$ and $v_{EU}$ are dependent variables,

$p_{US}$ and $p_{EU}$ are the offers and counteroffers of each player (parameter represents the quality of negotiation proposals and is the proxy for Schumpeter Mark II entrepreneurship),

$\theta_{US}$ and $\theta_{EU}$ are the willingness to reciprocate by each player,

$\sigma_{US}$ and $\sigma_{EU}$ are the cooperative payoffs to both US and EU,

$\varphi_{US}$ and $\varphi_{EU}$ are the behavioural attitudes towards gains and losses by each party (parameter represents status quo valuation),
and $\sigma_{EU}$ are the status quo payoffs for USA and EU,

$A$ is the coefficient representing Schumpeter Mark I and Kirznerian entrepreneurship at international table.

This representation of the negotiation firstly retains the principal insights of the bargaining process and game theoretic models. By allowing parameters to vary at any time point, the model ensures that willingness to cooperate $v$ is not constant and hence there are ways to make negotiation settlement more likely. Secondly, it considers interdependence between two parties (willingness to cooperate of one of the parties dependent on the behavioural and entrepreneurship parameters of the other party – $\theta$ and $p$). Thirdly, it acknowledges the two principal factors that affect negotiation settlement (cooperation and status quo utilities).

However:

a. We distinguish between factors that influence the timing and path of the negotiation and the likelihood of cooperation, and factors that determine the size of benefits and losses (and hence the mere possibility of cooperation); and

b. We allow for a greater number of factors that have influence on $v$ – we distinguish behavioural factors ($\theta$ and $\varphi$) and entrepreneurial factors that impact on $v$ directly ($A$ and $p$) and indirectly – by means of strategic influence instruments that affect the size of $\sigma$ and $\sigma_{EU}$. Below we show that the domestic policy parameters, as well as variables, representing consensus building and advocacy, protectionist policy demise and resoluteness to defend protectionist policy also enter the willingness to cooperate equation.

4.2 Likelihood and Timing of Cooperation

The parameter $\theta$ stands for the attitude of the player towards the actions of the other player. If one of the players makes an offer, the other may perceive this offer either in distributive (improving the position of only one player) or integrative (potentially improving the position of both players) terms. In the former case the second player will respond with a counteroffer of the same type (distributive) and the likelihood of a negotiated settlement will be decreased; in the latter, the integrative-type response may lead to the chain of mutually favourable offers and
counteroffers, culminating in negotiated settlement. Thus $\theta$ may take the value of $\theta \in (-\infty; 0)$ in the former case and $\theta \in (0; +\infty)$ in the latter.

The parameter $\theta$ is put together with parameters $p_{US}$ and $p_{EU}$, which stand for the quality of proposal making and the entrepreneurial approach to negotiations. The entrepreneurial approach to proposals making (Schumpeterian Mark II entrepreneurship) is associated with finding appropriate means (organisational as well as recombinant) to expedite talks in order to bring agreement (of which entrepreneurs have vision and projection) into being. We assume that $p_{US}, p_{EU} \in (0; +\infty)$ are dimensionless with higher values standing for situations when the degree of policy entrepreneurship is high. The exercise of Schumpeterian Mark II policy entrepreneurship, does not always go hand in hand with international trade theory prescriptions (i.e. proposals made are not necessarily superior from an economic theory view). Thus, higher values of $p_{US}$ and $p_{EU}$ have no indication as to the quality of final agreement. Neither does exercise of policy entrepreneurship have any distributive implications; that is, it does not change the size of countries' payoffs. Rather it increases the likelihood of cooperative outcome. Hence, it enters directly into the willingness to cooperate equations. For this latter reason, in order to increase a country's willingness to cooperate, high values of $p_{US}$ and $p_{EU}$ have to be amplified by high and positive values of $\theta_{US}$ and $\theta_{EU}$. Hence the likelihood of cooperation is expressed as $\theta_{EU} p_{US} + \theta_{US} p_{EU}$, where the Schumpeter Mark II entrepreneurship of one country is reinforced by the integrative-type orientation of the other country.

Parameter $A \in [1; +\infty)$ represents Schumpeter Mark I leadership and Kirznerian consensus building entrepreneurial activities at international table by top national and GATT/WTO figures, particularly the GATT/WTO Director General. We argue that the leadership capability of the top GATT bureaucrat is a function of his/her personal characteristics. It appears that Arthur Dunkel and Peter Sutherland have exhibited far more leadership and facilitation than any previous (E. Wyndham White, Olivier Long) or subsequent (S. Panitchpakdi) Directors General, this being one of the reasons why the Uruguay Round was particularly successful among all other GATT Rounds. Regarding top national figures (heads of state and ministers), in contrast to actual negotiators (ambassadors, trade representatives), their direct involvement is less frequent; however, their leadership capability is quite substantial, stemming not from their
personal characteristics, but more from their independent position in the political system, the amount of discretion that they possess and their ability to rise over bureaucratic inertia and political turf.

The parameter $A$ is dimensionless, with higher levels of $A$ standing for higher Schumpeter Mark I and Kirznerian consensus-building entrepreneurship. We argue that these two types of entrepreneurship have generic effects on every participant and increase the willingness to cooperate by all parties; hence $A$ stands without subscripts for US and EU$^4$. Similarly to Schumpeter Mark II entrepreneurship, these two types of entrepreneurship increase possibilities of cooperation, rather than the size of cooperative payoffs. We assume that when $A=1$, entrepreneurial efforts to facilitate the negotiation process are unsuccessful, whereas when $A>1$, entrepreneurial activities increase the willingness to cooperate.

4.3 Cooperation Payoffs

We express cooperation payoff:

1) when there are no domestic constraints and domestic political developments do not matter, and

2) when such domestic factors influence the size of payoffs.

In the former case, the cooperative outcome is also a Pareto efficient outcome, i.e. the Pareto efficient allocations will lie on the feasibility set (Figure 1), and the distribution of gains between two parties is determined by the bargaining power parameter $\alpha_{US}$ – for example, higher gains for the USA at point $A$ ($\alpha_{US} = 0.9$), and higher gains for the EU at point $B$ ($\alpha_{US} = 0.1$).

In the latter case, the strength of domestic constraints may preclude negotiators from achieving Pareto efficient allocations on the feasibility constraint; the exact payoffs and allocations will depend on the size of domestic policy parameters. We set parameters $\phi$ and $\delta$ to be the domestic negotiation constraints of the USA and EU respectively; they are determined by the strength of pro-liberalization and pro-protectionism domestic interests. If the strength of the pressure of

$^4$ As far as leaders of the countries with disputes and conflicts limited only to trade domain (i.e. OECD countries without major security or ideological divisions) are concerned, the broader vision of relations, ability to assume political responsibility and risk and independence allows them to resolve issues that are “unresolvable” by lower-level bureaucrats. Hence, when it comes to initiatives of top figures, it is easier to reach the agreement “in principle” at a higher level and to delegate to lower bureaucratic level the tasks, associated with detailed elaboration of the agreement, finding precise formulations etc.
the two groups is similar, then their relative influence of one group will be balanced by the influence of the other group \((\phi = \delta = 1)\), the overall pressures will be minimised and will no longer matter for the negotiation outcome, i.e. Pareto efficient allocation is attained. If either one of the domestic policy parameters or both of them are smaller than one \((0 < \phi < 1, 0 < \delta < 1)\), the allocations of players will lie within the Pareto frontier, and hence there is scope for Pareto improvement. The corresponding allocations of the USA and EC will lie on the dashed curves, and in the particular case when both countries experience strong pro-protectionist pressures \((\phi < 1 \text{ and } \delta < 1)\), will be located at point C \((\sigma_{US}^0, \sigma_{EU}^0)\). Thus, when domestic policy parameters are not high enough, there is possibility that the size of cooperation payoffs \((\sigma)\) is smaller than the size of status quo payoffs, making the willingness to cooperate \(v\) negative (provided that other parameters in Equations 1 and 2 stay unchanged) and precluding any settlement. Figure 1 illustrates this: cooperative payoffs at point C are closer to the origin than status quo payoffs at point D.

**Figure 1 - Domestic Constraints, Bargaining Power and Payoffs of the USA and EU**

As the size of domestic parameters \(\phi\) and \(\delta\) depends on the relative pressure of pro- and anti-reform groups, it is necessary to define their pressure functions. The process of political

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\(\phi, \delta \in (0; +\infty)\) so that the possibility of negative payoffs is eliminated.
influences (and hence the pressure functions) are different for the USA and the EU. While in the USA the political influence by opposing lobbies is exercised directly upon Congress, in the EU there are several levels of lobbying. In the EU case we define two sets of countries – the first set includes EU members interested in preservation of protectionist policies (for example, France) and we denote their political pressure as $\pi_{prot}$; the second set includes members interested in liberalisation (for example, UK), their pressure is denoted as $\pi_{lib}$. In addition we take into account the Kirznerian consensus building entrepreneurship, which involves coalition building within domestic policy system and bureaucratic apparatus. We conceptualise Kirznerian pro-reform consensus building as an activity performed by a variety of actors across all levels of the EU policy system. We denote the overall result of this activity as:

$$k = \frac{\beta_{lib} m_{lib}}{\beta_{prot} m_{prot}}.$$  

(3)

where $\beta$ stands for the effectiveness of Kirznerian entrepreneurship and $m$ for the intensity of entrepreneurial effort. The domestic policy parameter for the EU can therefore be written as

$$\delta = \left( \frac{\pi_{lib}}{\pi_{prot}} \right)^k.$$  

(4)

When $\delta > 1$, $\pi_{lib} > \pi_{prot}$ and $k > 1$, the size of cooperative payoffs ($\sigma$) and therefore willingness to cooperate $\nu$ are maximised (Equation 2).

We argue that the political pressure in a current period ($\pi_{prot}$) by a protectionist member of the EU, such as France, is influenced by cost-benefit considerations of this member state. The cost of keeping its current protectionist stance is negatively related to its pressures to retain status quo\(^6\). Regarding the current benefits that France derives from the protectionist policies ($\sigma_{prot}$) and its decision frame (it was shown that for a country in a gains frame $\varphi > 0$), we argue that both are positively related to the strength of protectionist pressures\(^7\). As to continuation of current benefits into future periods ($\sigma_{prot}$), it is clear that any change from the current

\(^6\) This axiom is derived from the economic theoretical underpinnings of political behaviour by G. Becker (1983) – the cost of political action negatively correlates with its supply.

\(^7\) Higher current benefits and aversion of losses associated with future changes makes the protectionist keep or increase its pro-status quo pressure in the current period.
privileged position will imply losses for France and hence its current protectionist pressures will be increased. Hence,

\[ \pi_{prot} = \phi_{prot} \sigma_1^{prot} + \sigma_2^{prot} - c \]  

(5a)

We mention at the same time that liberalization pressures are potentially present in the protectionist state too. These may be strengthened (the case of Uruguay Round), when the potential benefits of non-agricultural sectors (industry, services) are likely to increase (if agricultural protectionism is dismantled), but also when the agricultural sector finds other ways of existing in the absence of protection (e.g. is promised new markets etc.). These benefits are new in the sense that they are distinguished from the benefits associated with current policies (\( \sigma_1^{prot} \)) and from their extensions into the future (\( \sigma_2^{prot} \)).

We define liberalization pressure as \( \pi_{other} \) being a function of potential benefits (\( \sigma_2^{other} \)) of both protected and non-protected sectors, if liberalization of protected sector takes place –

\[ \pi_{other} = f(\sigma_2^{other}) \]

If \( \sigma_2^{other} \neq 0 \) (at least some benefits are possible) and \( \frac{d\pi_{other}}{d\sigma_2^{other}} > 0 \) (higher potential benefits leading to higher liberalization pressures by these sectors in current period), protectionist pressure \( \pi_{prot} \) decreases. Hence,

\[ \pi_{prot} = \phi_{prot} \sigma_1^{prot} + \sigma_2^{prot} - c - \pi_{other} \]  

(5b)

In contrast, the EU member state that is currently pressuring for a more liberal policy is experiencing negative current benefits (\( \sigma_1^{lib} < 0 \) ) due to being donor (paying for/subsidising protectionist policy, such as Common Agricultural Policy – CAP); it is in a losses frame (\( \phi < 0 \)), hence its liberalization pressures will be increased. In the future, following trade liberalization, it will incur smaller payments for protectionist policy and this is another incentive to pressure for liberalization (positive relation between \( \sigma_2^{lib} \) and \( \pi_{lib} \)). As in the case of protectionist, the higher costs of political influence decrease the amount of this influence. For our analysis we assume the political influence costs of a liberal state are fixed. Thus,

\[ \pi_{lib} = \phi_{lib} \sigma_1^{lib} + \sigma_2^{lib} - c \]  

(6)

As a result the domestic policy parameter of the EU can be expressed as:

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8 The combination of \( \phi < 0 \) and \( \sigma_1^{lib} < 0 \) give positive \( \phi_{lib} \sigma_1^{lib} \).
The use by the pressuring state (USA) of synergistic strategies – restructuring, threats and tying hands can increase the value of $\delta$ in the target state (EU) and its willingness to cooperate $v^9$. Tying hands, administered on the protectionist EU member, increases its costs of exercising political pressure (hence $c'$ is added to $c$). Restructuring that can potentially increase the benefits of all members, by according side payments ($\sigma'$) to the protectionist but also improving welfare prospects of liberalizer, increase both $\sigma_{lib}^2$ and $\sigma_{other}^2$ (and hence increase both $\pi_{lib.}$ and $\pi_{other.}$). Threats decrease benefits of a protectionist member state in the future periods ($\sigma^*$ is subtracted from $\sigma_{prot}^2$). For EU member state interested in liberalization, threats (if credible and if actually changing policy) will increase its benefits in the future (smaller expenditure and fewer trade frictions) and therefore will also increase its pro-liberalization political pressure in the current period ($\pi_{lib.}$). The impacts of threats on this country will therefore be similar to the impact of restructuring: both will increase $\sigma_{lib}^2$ by $\sigma'$. Thus, the new domestic policy parameter, when influence strategies are administered, is:

$$\delta_i = \left( \frac{\varphi_{lib} \sigma_{1lib}^i + \sigma_{2lib}^i - c}{\varphi_{prot} \sigma_{1prot}^i + \sigma_{2prot}^i - c - \pi_{other}^i} \right)^k$$

(8)

It is clear that if the mix of influence strategies is used, the value of the denominator (numerator) is decreased (increased) and the EU domestic policy parameter is increased ( $\delta_i > \delta$ in Figure 2).

### 4.4 Additional Considerations

May (1992) and Pemberton (2000) in the context of macroeconomic policy mention the possibility of policy reform (demise of old policy) due to accumulating inconsistencies, failing attempts of piecemeal reforms, decreased attractiveness of old policy ideas, that open way to more radical transformations. These developments are systemic and are not entrepreneurship per se. However, entrepreneurial activities are part of it (Schumpeterian Mark II tinkering or

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9 Note that the use of another influence strategy – reverberation – does not affect payoffs but has a “generic” consensus building effect. It is represented by parameter $k$ and enters directly into domestic constraint equations 7 and 8.
gradual Kirznerian consensus-building). These systemic changes also have (1) impacts on the size of the status quo payoffs (specifically reducing them) and (2) affect the behavioural orientations of the EU policymakers (reducing the relative attractiveness of current policy).

Firstly, the process, when policy ceases to perform in an intended fashion (with incremental and palliative reforms being a response of policymakers to this problem), clearly affects to a greater extent those EU members that benefit from the protectionist policy (such as CAP) and to a lesser extent those members that finance it and benefit less from it. However, when it comes to defending this policy at international level, the EU as a whole, irrespective of these distributional impacts, will be less inclined to preserve deteriorating status quo policy. Hence, we model this process as a gradual demise of protectionist policy and associated gradual reduction of status quo payoffs of the EU as a whole (i.e. we assume that at any point during negotiations, $\sigma^{sq}_{EU}$ is reduced by some value $\left(\sigma^{sq}_{EU}\right)$).

Secondly, the attractiveness of protection in the eyes of Community policymakers is affected not only by the decision frame, and the associated perceptions of gains and losses (parameter $\varphi$), but also by how persistently both EU policymakers and their counterparts in other countries (who attempt to influence the EU) intend, respectively, to defend protectionist policy and to pressure for its dismantlement. Foreign counterparts, by showing their resoluteness to attain the desired outcome, can change the position of the target state policymakers substantially. If the degree of their resoluteness is high, EU policymakers, having weighted pro and con, irrespective of which particular influence strategy is used by counterpart, may decide that keeping policy unchanged is no longer attractive in the presence of foreign pressure. For EU policymakers, their resoluteness to preserve the current version of protectionist policy is a function of the overall salience and importance of this protectionist construct and associated ideology. When alternative ideas about agricultural policy swarm into the policy system and reduce the attractiveness of the protectionist ideas and constructs, the resoluteness of the EU policymakers to keep policy intact may be reduced. These two factors affecting policy attractiveness amplify each other (and are thus put together in the denominator in Equation 9) – the foreign pressure is successful when the EU policy system is pervaded by liberalization ideas, i.e. the revision of the status quo is driven by ideational and institutional change and is also activated by strategic influence.
Hence we introduce two parameters – \( t \in (0; +\infty) \) standing for resoluteness of the USA and other countries interested in trade liberalization, with higher values of \( t \) representing a higher degree of resoluteness; and parameter \( \varepsilon \in (0; +\infty) \) standing for the strength of pro-reform institutional and ideational change in the EU, with higher values of \( \varepsilon \) corresponding to higher strength and/or speed of this change. The EU resistance to change function can be therefore written as

\[
 r_j = \frac{\varphi_{EU}}{\varepsilon I} (\sigma_{EU} - (\sigma_{EU} \varepsilon) )
\]

\( \varphi_{EU} \) represents a gradual erosion of the status quo payoffs associated with the protectionist policy; argument in front of the brackets stands for ideational and institutional change, reduced attractiveness of the old policy and the resoluteness of the US and pro-liberalization countries. This function enters as an argument into the willingness to cooperate equation, with lower resistance to change leading to higher willingness to cooperate\(^{10}\).

Before evaluating how all the above factors influence the EU’s willingness to cooperate, it is necessary to establish the relationship between the domestic policy parameter \( \delta \) and the cooperative payoffs \( \sigma \). The cooperative outcome \( v \) is not only the function of the countries’ willingness to cooperate \( (v_{US}, v_{EU}) \), but also a function of cooperative payoffs of both parties and their relative bargaining power –

\[
 V(v_{US}, v_{EU}) = \sigma_{US}^{\alpha_{US}} \sigma_{EU}^{1-\alpha_{US}}
\]

in the case when there are no domestic constraints. It is also the function of domestic policy parameters –

\[
 V(v_{US}, v_{EU}) = \sigma_{US}^{\alpha_{US}} \sigma_{EU}^{1-\alpha_{US} \delta}
\]

in the case when domestic policy matters \( (\phi > 0, \delta > 0) \).

In order to express cooperative payoffs as a function of domestic policy parameters, feasibility set and bargaining power, the Equations 10 and 11 are maximised subject to feasibility constraint:

\[
 \sigma_{US} + \sigma_{EU} = S
\]

The best-response functions for both the US and EU are as therefore follows\(^{11}\):

\(^{10}\) See Equations 15 and 16.

\(^{11}\) Derivation details are available upon request. Derivation of best-response functions (Equations 10-14) follows approach adopted by Gibson (2003: 86-87).
By substituting Equation 7 into Equation 14, and by inserting the latter together with Equation 9 into Equation 2, we get complete expressions for the EU’s willingness-to-cooperate:

\[
v_{EU} = A(\theta_{US} p_{EU} + \theta_{EU} p_{US}) \left( \frac{\phi_{lib} \sigma_{lib}^{lib} + \sigma_{lib}^{lib} - c}{\phi_{prot} \sigma_{prot}^{p} + \sigma_{prot}^{p} - c - \sigma_{other}^{lib}} \right) \left( \frac{\phi_{lib} \sigma_{lib}^{lib} + \sigma_{lib}^{lib} - c}{\phi_{prot} \sigma_{prot}^{p} + \sigma_{prot}^{p} - c - \sigma_{other}^{lib}} \right)^{k} S - \frac{\phi_{EU}}{\epsilon_t} (\sigma_{EU} - (\sigma_{EU}^{eq}))
\]

If influence strategies are used, the equation is transformed into:

\[
v_{EU} \prime = A(\theta_{US} p_{EU} + \theta_{EU} p_{US}) \left( \frac{\phi_{lib} \sigma_{lib}^{lib} + (\sigma_{2}^{lib} + \sigma^{p}) - c}{\phi_{prot} \sigma_{prot}^{p} + (\sigma_{2}^{prot} - c - \sigma^{p}) - (\sigma_{other}^{lib} + \sigma^{p})} \right) \left( \frac{\phi_{lib} \sigma_{lib}^{lib} + (\sigma_{2}^{lib} + \sigma^{p}) - c}{\phi_{prot} \sigma_{prot}^{p} + (\sigma_{2}^{prot} - c - \sigma^{p}) - (\sigma_{other}^{lib} + \sigma^{p})} \right)^{k} S - \frac{\phi_{EU}}{\epsilon_t} (\sigma_{EU} - (\sigma_{EU}^{eq}))
\]

It is clear that willingness to cooperate (and thus likelihood of liberalisation) is higher \((v_{EU} \prime > v_{EU})\) if above-mentioned entrepreneurial and behavioural factors are considered. Figure 2 illustrates release of feasibility constraint and Pareto improvement (movement of solid and/or dashed frontiers north-eastwards).
5. CONCLUSIONS

The synthetic framework for the analysis of trade liberalisation negotiations embraces complexity of the issue. Based on a two-level game concept, it also incorporates behavioural variables, considers exercise of policy entrepreneurship, and allows for systemic policy changes. The framework contributes to the literature as follows.

Firstly, it introduces agency (entrepreneurship) in the analysis, making it a central component of trade liberalisation talks, in contrast to approaches that focus on factors that are incidental or of secondary importance to policy analysis.

Secondly, it examines the context of policy entrepreneurship – behavioural factors that may hamper or enable entrepreneurship (intensity of interest in particular policy issues, attitudes towards cooperation and towards gains and losses); institutional and ideational factors that affect the attractiveness of status quo policies and resoluteness to defend them and that gradually prepare policy system for reformed/new policies and thereby facilitate negotiations at international table.
Thirdly, while retaining the concept of strategic influence, the framework allows for a broader spectrum of agency – entrepreneurial leadership, advocacy based on framing and ideational change, entrepreneurial experimentation.

Fourthly, the framework points to complementarities of the variables and processes and variation of the respective parameters, which in turn allows varying willingness to cooperate and resistance forces.

Finally, whilst not discussed extensively, the framework exposes omnipresence of entrepreneurship in policy system, the insight long mentioned by Austrian school economists. Two specific issues are central to the framework:

1) The importance of the readiness of the policy system (either due to preceding pro-liberalisation consensus-building and framing, or due to ongoing demise of protectionist policy).

2) The importance of multiple (or perhaps all) variables and processes presented for the successful and timely conclusion of liberalisation talks (both appropriate entrepreneurial action, favourable behavioural orientations, propitious benefits-losses balance).

Whilst, the propositions were not proven formally, they nonetheless provide guidance as to the variables and processes (and their combinations) that determine negotiation outcomes. Their relative importance clearly varies depending on the negotiation issue in question.

Model can be extended by further examining institutional parameters (learning, experimentation at pre-negotiation stage, demise of protectionist policy through accumulating inconsistencies). Also, the modelling of ideational change may be attempted. Three-level or multilateral settings may also be incorporated. The framework may be applied in a variety of policy domains (international environmental negotiations, international monetary cooperation), whilst retaining its basic structure.

REFERENCES


