DYNAMICS OF TRADE LIBERALIZATION

- **Political Economy of Tariffs:**

  In order to understand dynamics of trade liberalization, need to consider political economy of tariff choices

- **Grossman and Helpman (1994) and others model tariffs in context of supply and demand for protection in political market**

- **Supply of protection is marginal cost to government of imposing tariff, cost being damage to economy**

- **Demand for protection linked to marginal benefits of tariff measured in terms of impact on profits of import-competing firms**

- **Figure 1 a tariff increase, reduces consumer surplus by (-a-b-c-d), raises producer surplus by (+a), and changes tariff revenue by (+c+g-e-f), net effect being –(e+f)+g (ignoring b and d)**

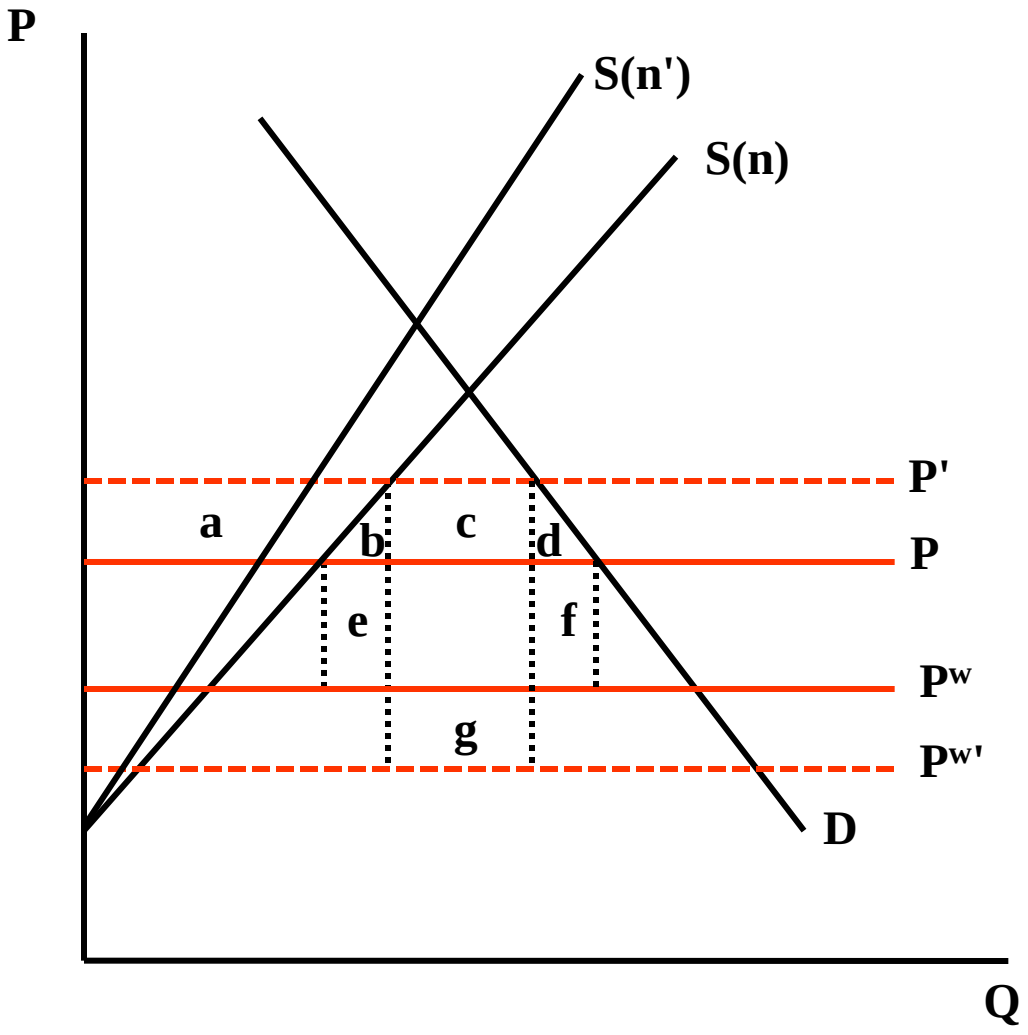

Figure 1: Welfare Effect of Raising Domestic Tariff

- **Net change positive at low tariff levels, but eventually becomes negative, imports falling as tariff rises**

- **In Figure 2, supply of protection is positively sloped, welfare cost of tariff increasing in tariff, and intersects vertical axis below zero, tariff being positive if country can influence world price**

- **Demand for protection stems from (+a) which increases with T, demand being positively sloped, and even at zero tariff, marginal benefit is positive if country produces good at world prices**

- **Politically optimal tariff given by intersection of supply and demand curves at E^{unil}**

- **<u>Juggernaut Approach</u>:**

  Multilateralism (MTN) alters political forces in country – reciprocity converts exporters into opponents of protection, i.e., can gain market access only if domestic tariffs are reduced

- **In Figure 3, lower foreign tariff raises export price, such that exporters gain surplus of A+B, domestic consumers losing surplus of A**

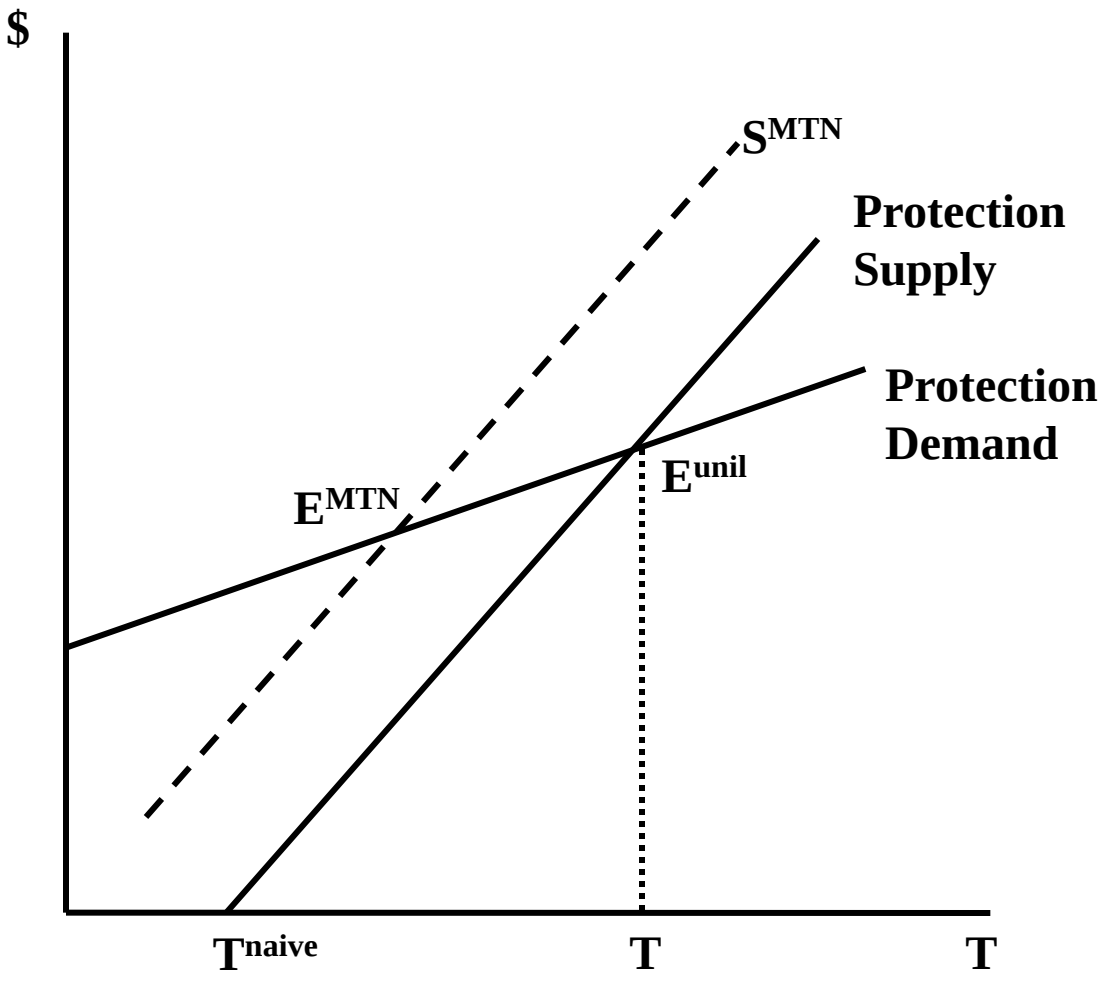

Figure 2: Supply and Demand for Protection

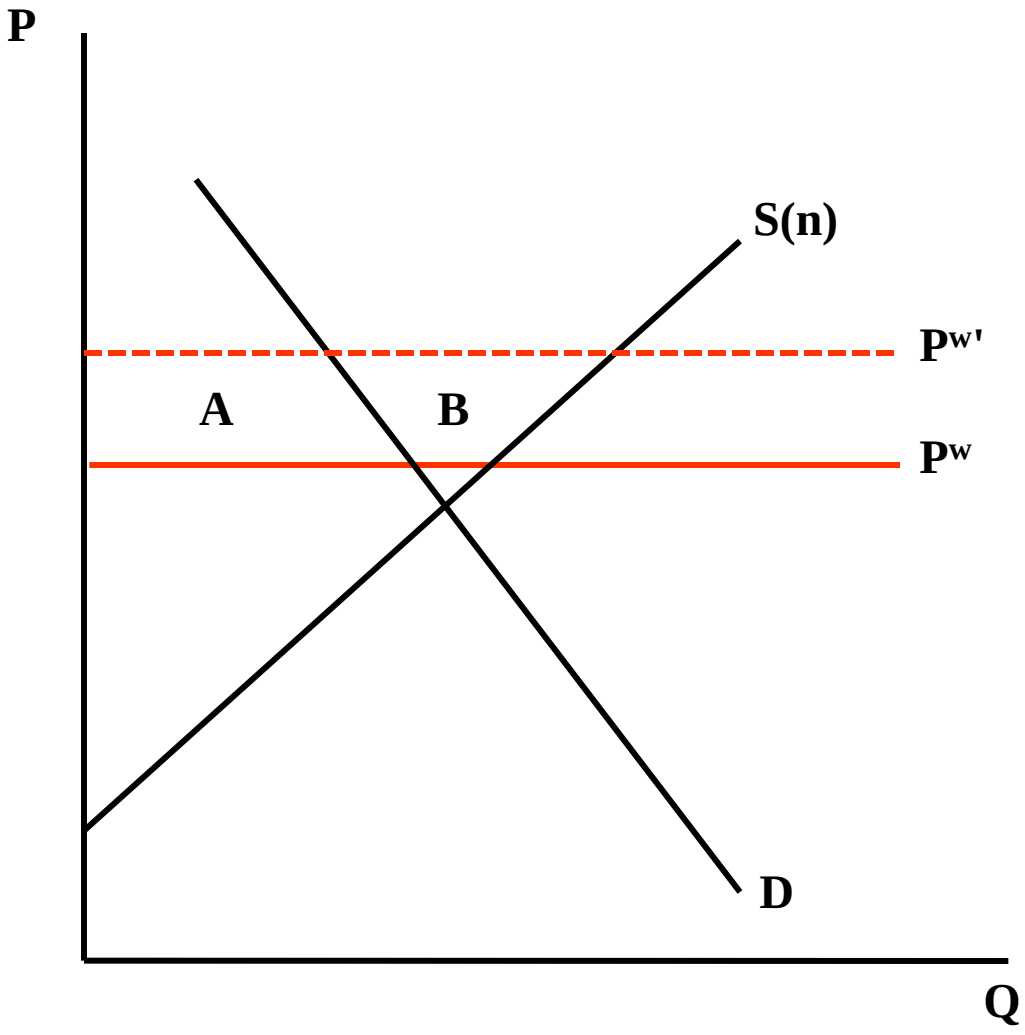

Figure 1: Welfare Effect of Lowering Foreign Tariff

- **Net benefit to exporters of reduction in foreign tariff raises marginal cost of protection – in Figure 2, reciprocity shifts supply of protection curve up to S^{MTN} – now politically optimal to cut tariffs**

- **Reciprocity solves political problem – difficult to put together a political coalition for unilateral trade liberalization – but juggernaut idea implies dynamic process**

- **Size of unilateral tariff hikes, and MTN tariff cuts depends on number of firms in import and export-competing sectors**

- **For example, a drop in domestic price will lead some import-competing firms to exit, domestic supply curve rotating counter-clockwise to S(n') in Figure 1**

- **Importantly, demand for protection would rotate down as marginal impact of tariff increase on import-competing firms would be smaller for any tariff T**

- **Therefore, impact of raising tariffs is twofold: higher tariffs raises number of firms, but higher number of firms raises politically optimal tariff**

- **Politically optimal tariff choice can be collapsed into one curve GFOC, and combined with free entry curve FE that relates equilibrium number of firms to tariff – Figure 4**

- **Number of import competing firms plotted on horizontal axis, where n itself is a function of tariff**

- **Tariff plotted on vertical axis, determined by government maximizing its objective function along GFOC**

- **Intersection of $GFOC^{unil}$ and FE gives combination of n and T at E^o, where government is choosing politically optimal tariff given n, and firms enter up to point of zero profits taking T as given**

- **<u>Reciprocity and Juggernaut Effect</u>:**

  By rearranging political economy forces inside a country, MTN raises marginal cost of protection to government of maintaining any given tariff T (taking n as given)

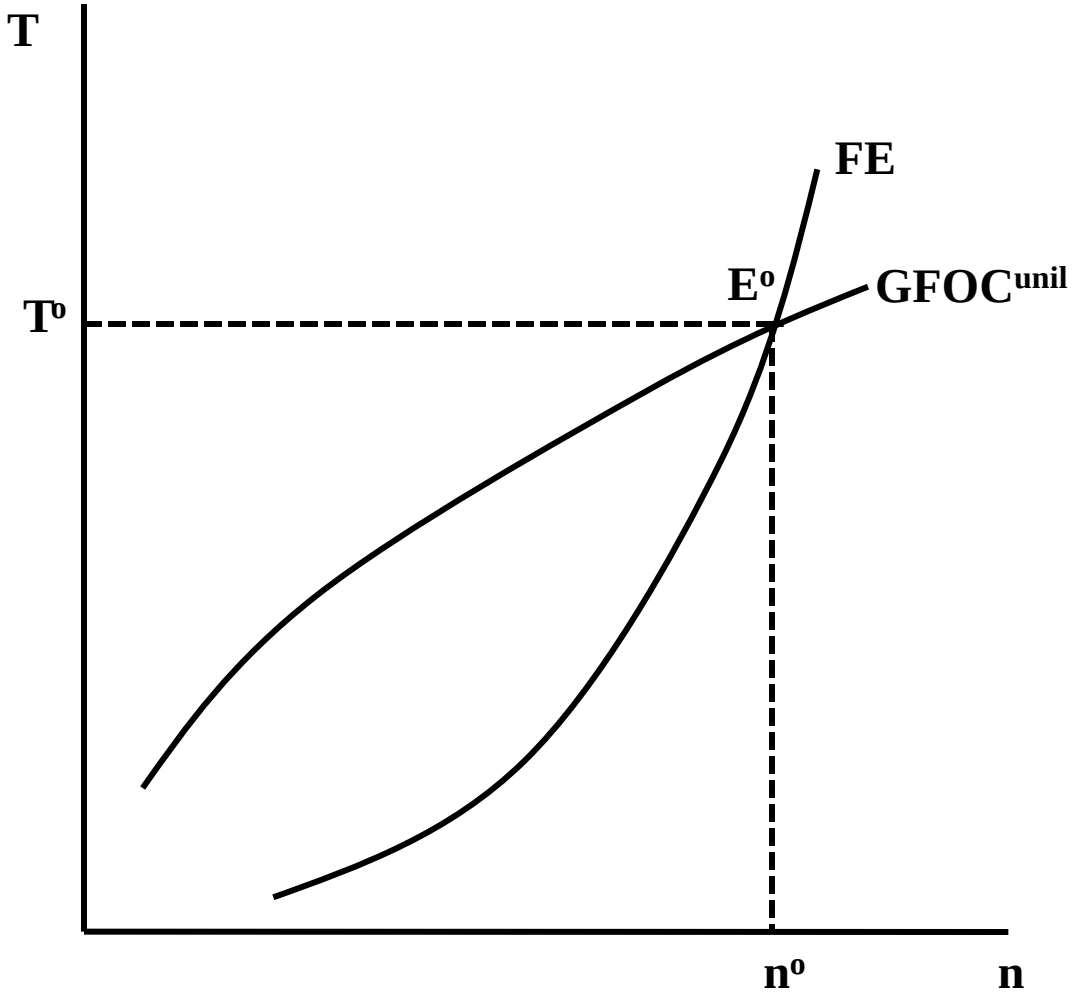

Figure 4: Juggernaut Framework

- **In Figure 2, supply of protection shifts up, while in Figure 5, GFOC curve shifts down, as government finds it optimal to set lower tariff for any n**

- **In Figure 5, new long run tariff equilibrium is E', but as entry/exit occur slowly, there is a dynamic process of getting there**

- **Reciprocity results in a drop of tariff to T^1, inducing some import-competing firms to exit (export-competing firms enter), economy reaching A**

- **At this point, more trade negotiations occur, with tariff dropping to B, given decrease in size of import-competing sector (increase in size of export sector)**

- **Cycle repeats itself until long-run equilibrium reached at E' – assuming MTN covers only trading partners or only part of traded goods**

- **If all trade is covered, shift in GFOC will be large enough to ensure long-run equilibrium involves zero tariffs at E^{final} – see Figure 6**

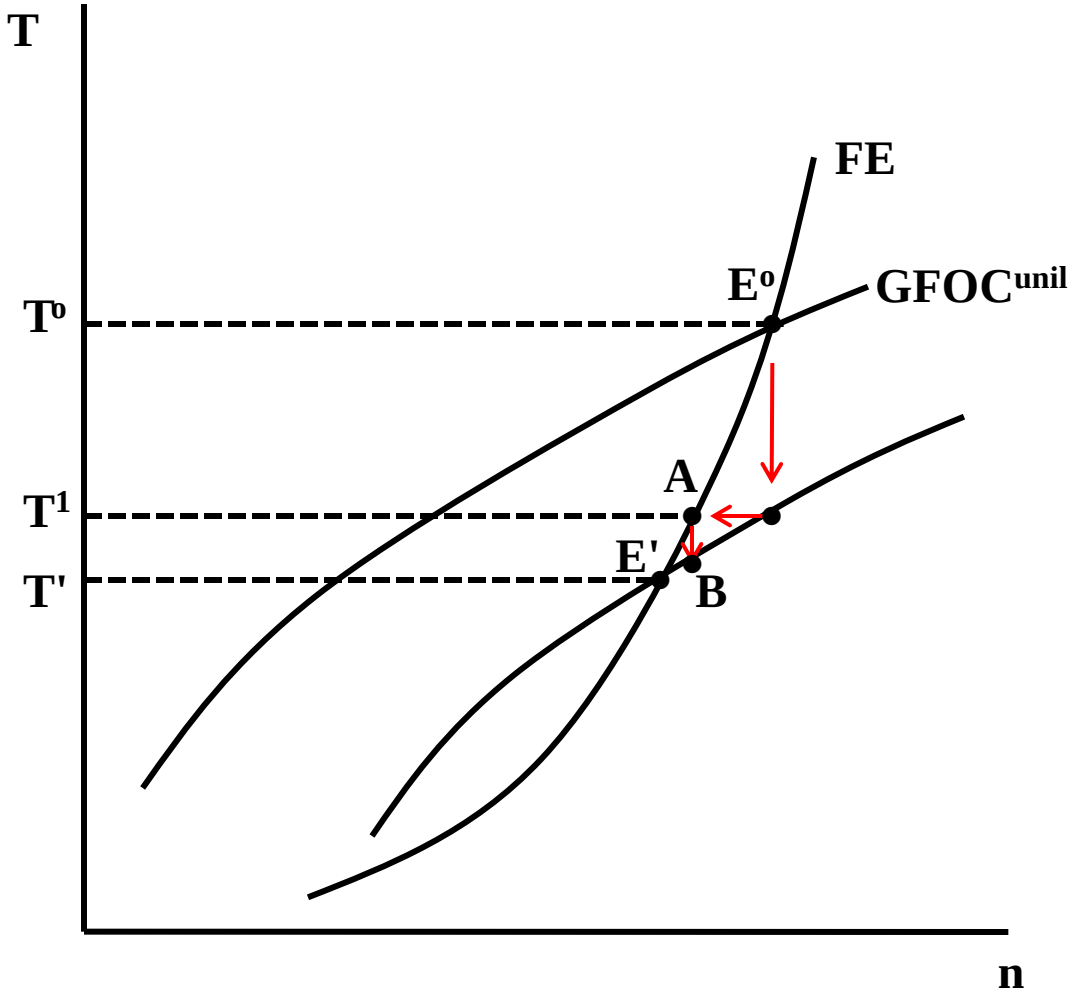

Figure 5: Juggernaut Effect and MTNs

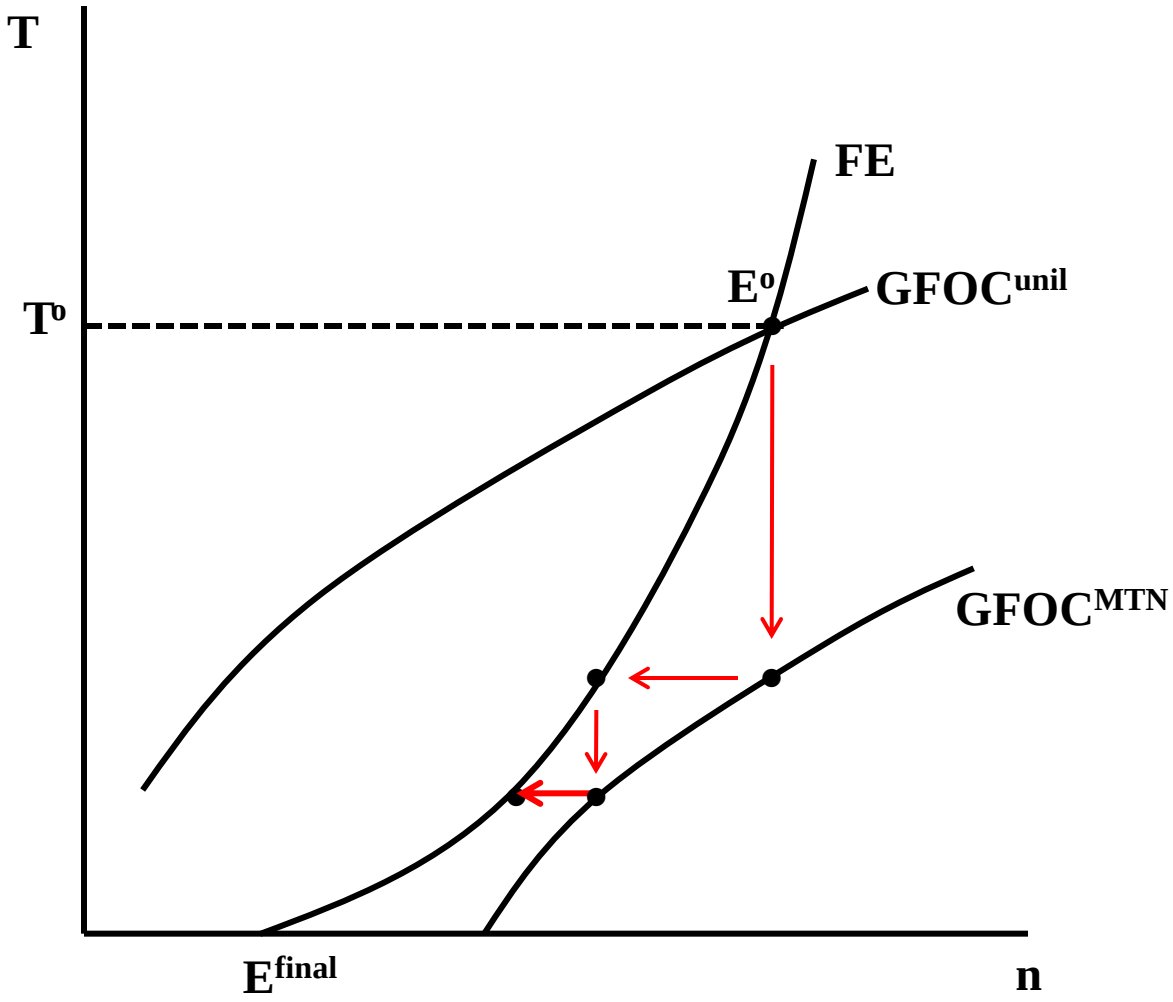

Figure 6: Juggernaut Effect and MTNs

- **<u>Dominos and PTAs</u>:**

- **Decision to join PTA depends on domestic political equilibrium balancing pro- and anti-membership forces**

- **Pro-membership forces associated with exporters who gain from preferential access if country joins, and lose from discrimination if country stays out**

- **Anti-membership forces associated with import-competing industries that lose from liberalization, as well as those who have non-economic objections to membership**

- **Given initial political equilibrium, an idiosyncratic shock deepening PTA's integration, results in non-member exporters having greater stake in membership, while anti-membership forces are also strengthened**

- **If output of export sectors exceeds that of import-competing sectors, and political influence is linked to size, shock shifts political economy equilibrium closer to joining PTA**

- **If a non-member actually joins PTA, enlargement increases discrimination against non-members, heightening pro-membership pressure to join**

- **Cycle continues until PTA reaches new political equilibrium domino effect being illustrated in Figure 7**

  EE curve shows pressure to join increases with membership of bloc, while RR shows resistance to membership, countries being arranged from lowest to highest resistance

  EE and RR intersect at initial equilibrium E^O, while deepening of integration within bloc will rotate EE up to EE', resulting in new political economy equilibrium

- **<u>Dominos and Juggernauts</u>:**

  Since formation of EEC in 1958, multilateral and regional liberalization have proceeded in tandem – so how are they connected in this framework?

- **FE schedule in Figure 4 assumes only one tariff, but with two trade partners, PTA with one can move FE schedule to left**

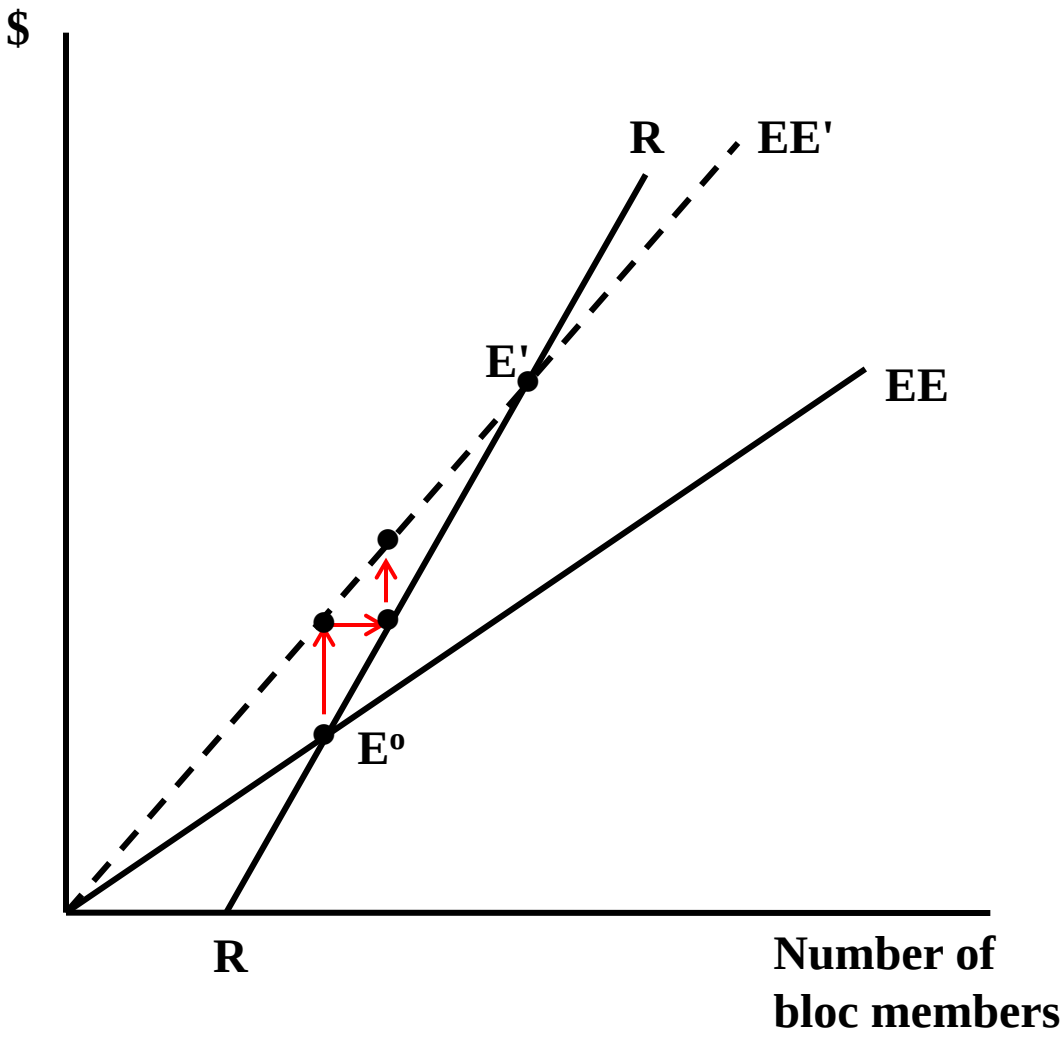

Figure 7: Domino Theory of Regionalism

- **FE gives n as function of MFN tariff rate T, but preferential tariff boosts imports from partner, i.e., higher degree of import competition than under MFN tariff**

- **In Figure 8, FE shifts to FE' due to increase in imports, but at same time, this lowers optimal MFN tariff from E^o to E', i.e., a trading bloc is a building block**

- **However, if PTA is trade diverting, lowering amount of imports corresponding to given MFN tariff, FE curve shifts right to FE'', i.e., politically optimal tariff increases – PTA is a stumbling block**

- **If MTN reciprocity is strong enough, MFN tariff will be driven to zero at E^{final} irrespective of whether PTA is trade creating or diverting (see Figure 8)**

- **Race-To-The Bottom Unilateralism**

  Rapid expansion of trade, especially in East Asia, due to unilateral rather than preferential trade liberalization

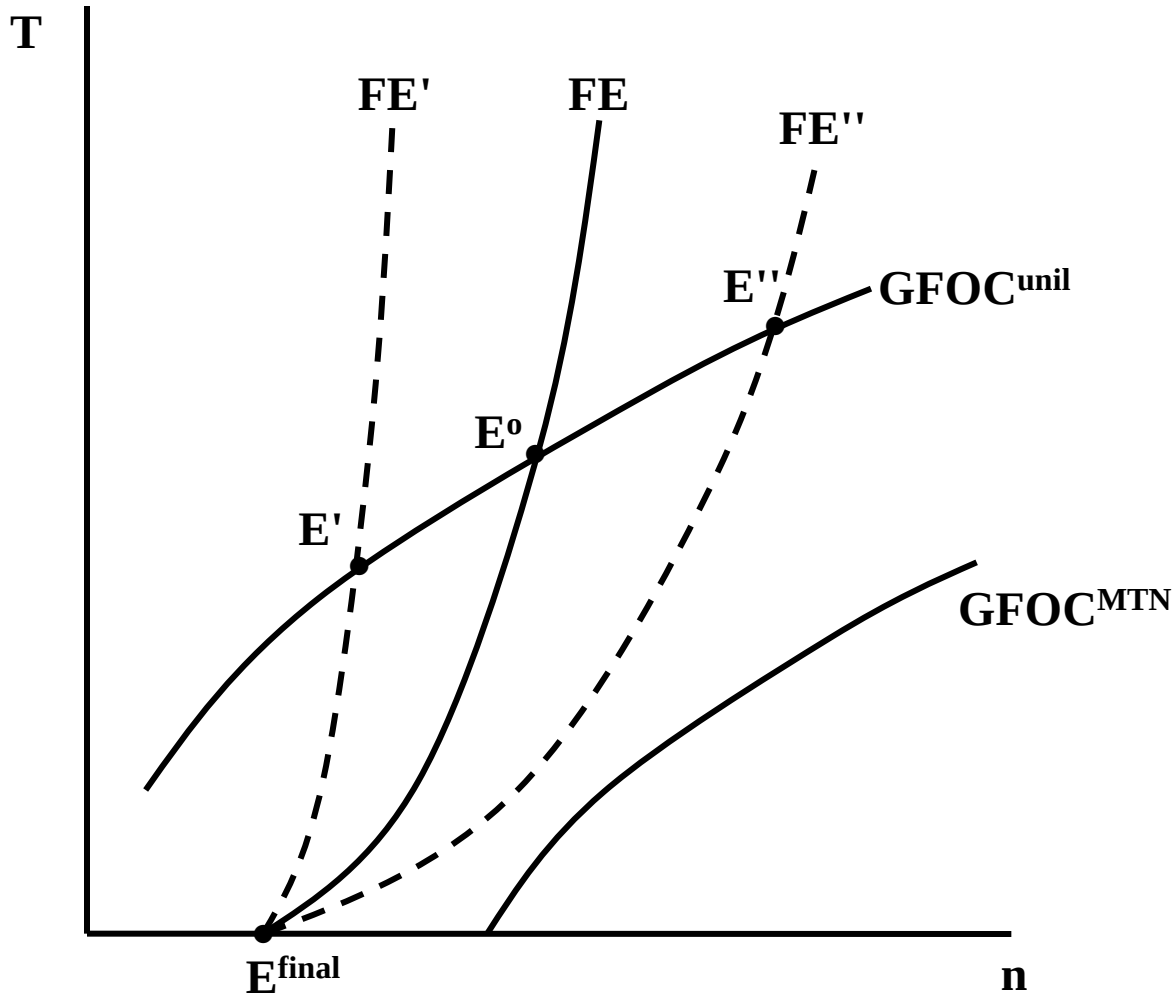

Figure 8: Dominos Start Juggernauts

- **Following success of Japan and Asian Tigers, many emerging economies followed 'dual-track' development of blocking imports of manufactured goods while encouraging exports - fitted in well with fragmentation of value-added chain**

- **Rising wages in developed countries, and decrease in transport and communication costs, have resulted in *unbundling* of vertically-integrated production in developing countries**

- **Labor-intensive stages have been offshored to emerging economies, who have competed with each other by unilaterally lowering their tariffs on imported intermediate goods used in assembly of final goods**

- **Political economy of these tariff cuts is different: intermediate goods only available from abroad, so no import-competing sector to harm with lower tariffs**

- **Also, tariff cuts seen as critical to generating new industry jobs – so unilateral tariff cutting became politically optimal, especially when other emerging economies started doing it**

History of Trade Liberalization

Time Period/Countries	Type of Trade Liberalization
1940s/1950s: 5 GATT Rounds – reached new political economy equilibrium by end of 1950s	Multilateral – *juggernaut effect* – tariffs between US and partners fell, weakening anti-trade forces
1960s: Foundation of EEC* (1958) and EFTA** (1960), and then UK, Ireland, Norway and Denmark all applied to join EEC (1961)	Regional – *domino effect* – pro/anti-membership forces realigned in countries outside of EEC due to trade diversion and lost trade creation
1962-67: US concerned about trade diversion due to EEC – Kennedy pushed for across-the-board tariff cuts in GATT Round	Multilateral – *dominos start juggernauts* – due to inability of US joining EEC, sought to reduce EEC's common external tariffs in GATT
1968: All tariffs removed on intra-EEC and intra-EFTA industrial trade; Kennedy Round of GATT reduced industrial tariffs	Regionalism and multilateralism – complements not substitutes
1973: UK, Denmark and Ireland join EEC – FTAs signed between EEC and EFTA – Europe virtually had free trade in industrial goods	Regional – *domino effect* – without FTAs, countries such as UK would have had to raise tariffs against former EFTA partners
1973-79: Consensus created for Tokyo Round due to expanded discrimination in Europe - some focus on reducing NTBs	Multilateral - *dominos start juggernauts* – industrial tariffs cut by third in Kennedy Round, agreed to cut by same amount in Tokyo Round
1986: Uruguay Round launched, EEC signed Single European Act to deepen integration, Canada proposed CUSFTA	Multilateral and regional – *juggernaut effect* – trade liberalization of 1970s strengthened export sectors – pushed for "behind border" measures

* Belgium, France, Germany, Italy, Luxembourg, Netherlands; **Austria, Denmark, Norway, Portugal, Sweden, Switzerland, UK

History of Trade Liberalization

Time Period/Countries	Type of Trade Liberalization
1991: Mexico asked US for FTA, subsequently Canada sought to join, leading to NAFTA in 1994; Latin American countries formed FTAs, e.g., Mercosur*	Regional – *domino effect* – Latin American countries not allowed into NAFTA, so like UK and EEC, formed trade blocs of excluded nations
1990s: Collapse of Soviet Bloc and USSR – EU signed 12 FTAs with CEECs; and EU bilateral FTAs with Turkey and 5 Euro-Meds	Regional – *domino effect* – creation of European "spaghetti bowl" with complex rules of origin
1990s: Mexico signed bilateral FTAs with EU, Japan and 40 other countries; Chile signed bilateral FTAs with NAFTA, EU and Japan	Bilateral – *juggernaut effect* – small nations seeking network of FTAs – trade blocs of Europe, North America and East Asia "fuzzy and leaky"
1997: EU15, EFTA4, and 10 CEECs signed PECS agreement to have common rules of origin – accounts for 40% or world trade	Multilateral – *dominos start juggernauts* - firms initially benefiting from spaghetti bowl became victims and lobbied against it
End of 1990s: "Factory Asia" established – resulted in "hollowing out" of industry in Japan, then Taiwan, Korea, Singapore and Hong Kong	Unilateral – *race to the bottom* – competitive tariff cutting on intermediates in 1990s, regionalism playing little role fostering East Asian trade
2000s: China joined WTO in 2001, triggering multiple bilateral and regional FTAs due to fears of Chinese competition	Regional – *domino effect* – creation of East Asian "noodle bowl" – by 2010, over 90 FTAs in effect, not clear if complexity is problem though

* 1991: Argentina, Brazil and Paraguay, subsequently joined by Bolivia, Chile, Colombia, Ecuador, Peru and Venezuela