ECN 330 Economic Integration and Multilateral Trade Liberalization

ECN 330 Exam Dec 2008

Part 1. Explain whether the following statements are true, false, or whether it depends. If depends is your answer, be sure to explain upon what it depends. (25 points)

1.1 Assessing whether a regulation is the least trade distorting would be relevant in the context of the national treatment principle but not the most favored nation (MFN) principle because MFN is only relevant for trade policy.

F. Least trade distorting is the effect on price and volume traded. A regulation can discriminate among trading partners and discriminate between local producers and foreign producers. This implies that a regulation can violate national treatment or MFN by distorting the relative price ratios.

1.2 A voluntary export restraint (VER), where an exporter limits its exports to an importing country rather than the importer applying a quota, is not a violation of WTO trade rules when/if the VER is a settlement between the two parties over an anti-dumping dispute.

F. A VER is an export quota, and quotas are generally a violation of trade rule. Dumping, which is either selling at below cost of production or selling abroad lower than at home, would not be corrected through the application of an export quota.

1.3 A domestic value-added tax (or a consumption tax) that is not applied on goods that are exported would be an example of a violation of national treatment.

F. Value-added or consumption taxes are applied at the point of consumption not at the point of production – so they are domestic taxes. Not applying a domestic consumption tax on a good destined for export is not a violation of national treatment. It would not act as a production or export subsidy nor does it distort relative prices in the foreign market.

1.4 A tariff-rate quota that has its market access volume set at a targeted share of the domestic market is equivalent to a local content measure.

T/D. A binding TRQ that meets some targeted share of the domestic mkt would be equivalent to a proportional quota at that targeted share. A proportional quota specifies the % of the local content a domestic product must have.

1.5 A regulatory measure aimed at establishing the quality requirements for fresh food products would be an SPS (sanitary and phytosanitary) measure rather than a TBT (technical barrier to trade) measure because of the scientific evidence that would be required to prove the product is safe.

F. SPS and TBT are defined by their specific objective. A quality issue addresses a technical definition of what constitutes "fresh", but does not involve what is safe or healthy. Therefore, this is a technical regulation or TBT issue.

Part 2. Briefly answer the following questions or provide the requested information. Relate your answers to concepts discussed in class and avoid unnecessary information. (45 points)

2.1 Economists tend to view government intervention through taxes and subsidies differently than intervention through the use of a trade policy measure. Think about how a taxation and subsidization scheme is similar or different from trade policy when answering the following: (15 points)

2.1.1 Do WTO rules defining the different categories of subsidies on agriculture (green, blue, or amber box) have meanings that are based on economic theory? Explain. (10 pts)

Type of subsidy	WTO definition or example of a policy	Economic meaning
Green box subsidy	Minimally trade distorting; targets specific objective; examples: extension, infrastructure or R+D	Yes, it has economic meaning. It is either neutral w.r.t. P, Q, C, and T, or it is welfare improving (correcting for some externality problem) or contributing to increased long-term productivity (comparative advantage).
Blue box subsidy	Income support requiring some ↓ Q	Yes, it has economic meaning. Income support is less trade distorting. It can be applied with less MA restriction and can be applied in a manner that does not require distortion to both sides of a mkt. In reality, however, blue box support was provided with MA protection to reduce gov't expenditures.
Amber box subsidy	Policy that → ↑ Q (price support, coupled income support, input subsidies, etc)	Yes, it has economic meaning. These are policies that are not neutral with respect to P, Q, C, T, and SW, and usually affect both sides of the market. Can also involve pure income support that does not require ↓ Q (but which would not affect C).

2.1.2 Suppose that a country applies a tariff on the imports of some good. Would the tariff, which is a market access restriction, require the computation of an aggregate measure of support (AMS) equivalent? In your answer, explain whether the AMS concept is consistent with welfare analysis from economic theory. (5 pt)

Yes, the tariff would have the effect of a price support and so would have a support equivalent. The AMS equivalent would be the price support effect, i.e., $(P_D - P_W) \times Q_S$, that the tariff would have. The problem with the AMS calculation in this case is that it would include the DWL in production and would ignore any large-country effects on P_W.

2.2 It can be argued that the standard textbook explanations for the differences in the four stages of economic integration are more difficult to apply in practice. Under WTO agreements, for example, there are only legally-recognized definitions for a free trade area and a customs union. Consider the differences in the stages in integration (from a free trade agreement to an economic union) when answering the following: (15 points)

2.2.1 *List* criteria that are usually used to differentiate between the stages of economic integration. (5 pts)

Stages of integration / List of criteria	FTA	Customs union	Common mkt	Economic union
Common trade policy: liberalize TIG (e.g., eliminate MA tariffs/quotas/regs w/ equivalent effect)	X	X	X	X
Common external trade policy: CET, same quotas, MA conditions and regs with equivalent effect Customs harmonization (common regs/institution)		X	X	X
Liberalize TIS: common regs/institutions; comp policy Approx + harmonize regs for TIG + TIS Free movement of labor: regs + stds → ↑ mobility Free movement of capital: regs + stds → ↑ mobility			X	X
Harmonize all economic policy and regs, including monetary and fiscal policy; supranat'al institutions				X

2.2.2 Keeping your list in mind, explain what economic convergence must imply through a free trade agreement and through deeper forms of economic integration. If the definitions of the stages of integration are difficult to apply in practice, what does this imply for the overall convergence (economic and non-economic) that is expected to occur from economic integration? Explain. (10pts)

Economic convergence: The more liberal trade policy is, the more likely the law of one price will hold, i.e., that the relative prices of goods will be the same across countries (which in turn cause factor prices to converge). However, different regs, transactions costs, non-homogeneous products and different preferences will prevent complete convergence. If trade is a big share of the economy, then there should be more pressure for convergence in the relative prices of goods and in relative factor prices (particularly if trade is based on different resource endowments or different technology). With deeper integration, regulations on trade in goods and services should become approximated or harmonized, which implies that rules on labor and capital movement should be more liberal. This is expected to result in faster convergence in relative prices ($[P_{Goods}/P_{Services}]_1 \approx$ $([P_{Goods}/P_{Services}]_2)$, which in turn should support convergence in the relative prices of relative factors ($[P_L/P_K]_1 \approx$ $([P_L/P_K]_2)$. Deeper economic integration also requires political convergence (common institutions – customs union, common competition policy, monetary union; pooling of sovereignty – loss of monetary and fiscal independence) and legal convergence (harmonization of regs, supra-national courts and similar interpretation of law, dispute settlement mechanisms). This process should strengthen competition and convergence in prices, K/L ratios and perhaps income per/cap levels. If political/legal convergence is difficult in reality, then regs will be approximated rather than harmonized, which would limit liberalization and integration and slow P convergence in goods, services and factors.

2.3 Trade in services is taking on an increasingly important role in international trade. However, the nature of a service makes creating trade rules under the WTO a bigger challenge than trade in goods. Think about the way in which country-specific commitments are taken in services when answering the following: (15 points)

2.3.1 *List* characteristics of a service that distinguishes it from trade in goods. What do the characteristics of services imply for policy intervention? (5 pts)

* Intangibility
* Non-storability
* Heterogeneity
* Non-separability

Services mkts are more prone to asymmetries of information (and mkt failure). Service products are more differentiated and intangible; therefore, it is harder to apply measures such as tariffs or quotas. Services are more likely to have networks effects that have implications for economies of scale and firm size (imperfect competition). TIS is driven more by domestic regulations rather than by trade policy measures. Domestic regs are not considered trade policy even when they affect trade.

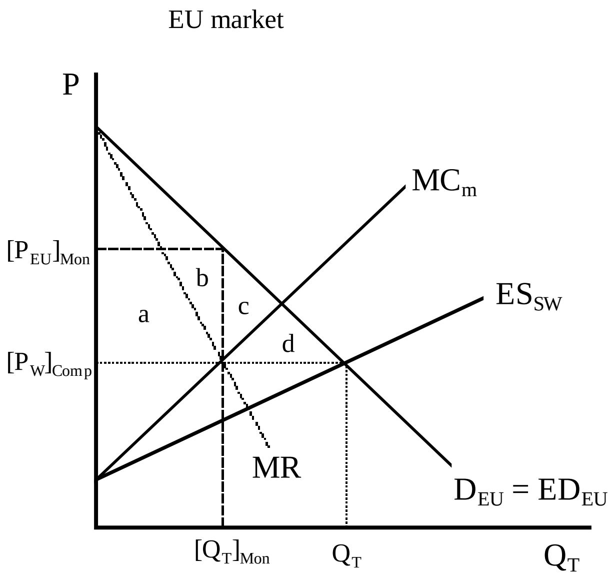
2.3.2 Does the manner in which country-specific commitments are taken on services imply that countervailing measures and safeguards do not have the same meaning in trade in goods as they do in services trade? Explain. (10 pts)

Country-specific commitments in services essentially specify how a country's regulations limit MA and nat'al treatment, and regs are not regarded as trade policy even when they affect/distort trade. Country-specific commitments in goods are more quantifiable (e.g., bound tariff ceilings, or the level of subsidies in the case of an ag product). If commitments on TIS reflect how regs limit trade on MA and national treatment, then safeguards (the right to temporarily restrict trade because of ↑ imports or ↓ P) do not have the same meaning as specifying a tariff ceiling that is too low (allowing ↑ imports or ↓ P). Neither trade taxes or subsidies on TIS are well defined. So, a CVM, which is a tariff applied to offset the effect of a subsidy on a service, is not defined. TIS are also defined by the mode in which service is provided. What would CVM mean in the case of mode 4 service? What sense would CVM have for consumption abroad? Therefore, neither safeguards nor CVM really make any sense in TIS and WTO rules on CVMs or SGs do not apply in TIS.

Part 3. Answer the questions related to the trade policy scenario described in the paragraph below. Be specific and explain your answers to the best of your ability. Label your graph(s) clearly and explain them. Define concepts you think will support your answer. (30 points)

Think about the purpose of protecting patents, trademarks and copyright. On the one hand, such protection amounts to a legal monopoly for a firm over a product. On the other hand, it is argued that such protection is the recognition that intellectual property is a non-physical asset that has a value just as any physical asset has. Nevertheless, controversies arise because counterfeits of intellectually-protected goods are sold through international trade. Suppose a Swiss firm produces a genuine Swiss watch that has been exported to the European Union (EU) for some time. (Note: Switzerland is not a member of the European Union.) Now, an Asian counterfeit of the Swiss watch is being imported into the EU and sold at a low price. The counterfeit good may or may not be equivalent to the genuine Swiss product in physical quality. (30 points)

3.1 Provide a simple model of the EU market to illustrate the trade and welfare implications of the scenario whereby the genuine Swiss product is sold on the EU market before the Asian counterfeit good appears on the EU market. Be specific and clear about whatever assumptions you make about the market. You might want to structure your answer in a table as presented below. (10 pts)



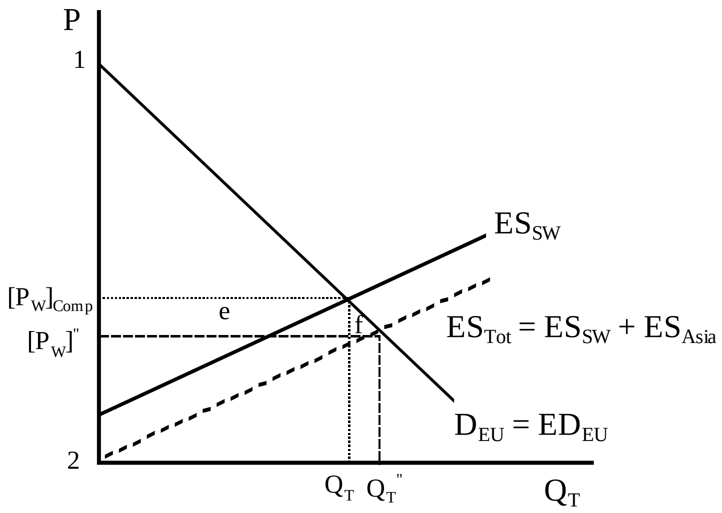
Where:
$D_{EU} = ED_{EU}$ because EU assumed to produce no like product;
ES_{SW}: Switzerland's export supply;
MC_m: marginal cost of import into the EU;
MR: marginal revenue of D_{EU};

Q_T: competitive free trade volume traded;
$[P_W]_{Comp}$: competitive free trade price;

$[Q_T]_{Mon}$: quantity traded when Swiss exporters of the genuine product can exploit their market power;
$[P_{EU}]_{Mon}$: price charged in EU where Swiss exporters exploit market power

Trade scenario:	Description of trade effects	Description of EU welfare effects
Before Asian counterfeit appears	Trade volume is restricted to exploit mkt power. Relative to a competitive free trade benchmark, the volume trade is halved.	By assumption, there is no EU production so there is only a loss in CS (equal to a+b+c+d).
After Asian counterfeit appears	Trade volume increases. If the product is indistinguishable to the consumer, then there would be more competition. The volume trade would increase and the price would fall as the Swiss exporters would lose their monopoly power.	Increased volume traded at a lower price would increase CS. The gain would include the previous value lost (a+b+c+d) and additional gains of (e+f).

3.2 Provide a new graph(s) of the EU market to show the effect of the Asian counterfeit good appearing on the EU market. (10 pts)



Where:
ES_{TOT} is the ES of both Switzerland and Asia
Q_T " is the quantity traded under competitive conditions in the EU mkt
P_W " is the competitive world price, and the EU mkt price given the Asian competition

3.3 What is the appropriate policy response by the EU under WTO rules? Explain. (5 pts)

According to WTO rules, the appropriate response would be a ban on imports or a tariff equivalent of line segment 12 (on the price axis). Such a policy intervention would restore the monopoly situation that existed in 3.1, reducing consumer welfare (assuming that the quality of the good is the same – which is not necessarily a correct assumption – and that consumers do not care about buying a counterfeit product).

3.4 Does intellectual property protection under WTO rules correct for the market failure or does it create the market failure? Explain. (5 pts)

If/when the product quality of a counterfeit is not verifiable, then intellectual property protection makes sense. Essentially, the protection of IP is argued to correct for a market failure problem. The market will provide insufficient protection and without regulation (IP protection), there would not be enough investment in product quality, research and product development that will ensure production. The temporary monopoly protection that is offered ensures that quality products will continue to appear on the market and consumers can be assured of the quality.

Summary solutions to ECN 330 final exam 2007

Part 1. Explain whether the following statements are true, false or whether it depends. (25 pts)

1.1 A regulation restricting the total number of service suppliers allowed to provide a service on the domestic market would be an example of a limitation on national treatment.

F. A limitation on the number of foreign service suppliers would be a limitation on national treatment; a limitation on the total number of service suppliers is a MA restriction.

1.2 Special safeguards allow import protection in cases when import volume increases above or domestic price falls below some specified levels (which can then automatically trigger a SSG). A country with low market access restrictions but high domestic support is more likely to initiate a SSG action based on a price trigger rather than on import volume.

T. Low MA restrictions means price support is low, but if DS is high, then it must come in the form of income support. So, a decrease in price will mean and increase in income support, causing higher gov't expenditures. The decrease in price will trigger the SSG action. Another way to think about it is that will low MA restrictions, import volume is less of a binding constraint.

1.3 WTO members have initiated more anti-dumping actions than countervailing actions because anti-dumping is a less precise legal and theoretical economic concept.

T. Initiating a CVM requires proof of the existence of a subsidy (a well defined concept and set of criteria) and that the subsidy is the cause of injury. However, dumping involves distinguishing between normal trading practice and unfair behavior based on prices and/or costs, e.g., $P_D > P_W$ and/or $P_W <$ Cost. Observing $P_D > P_W$ and/or $P_W <$ Cost is not sufficient evidence to prove that a firm is behaving unfairly because many mkt factors/situations can explain this. Therefore, AD actions are initiated more often because the concept is less precise.

1.4 Consider the use of policy intervention (either a market access restriction or a subsidy) in the import sector as a means to correct for an externality in the home country. A big difference between the MA restriction and the subsidy is that the welfare improvement under the subsidy is less likely to come at the expense of trading partners.

T/D. A subsidy that corrects for an externality is argued to be a more direct response to a problem. If the measure were a green box subsidy, then the improvement in SW will be least trade distorting and unlikely to negatively affect welfare of the trading partner. An import tariff, while justified policy intervention, will negatively affect welfare of the trading partner.

1.5 The process of liberalizing trade in goods under the WTO has essentially followed along the same lines as the EU's process to promote product market integration.

F. The WTO process of trade liberalization in goods is essentially a gradual movement toward a free trade area. Liberalization of trade in goods under the EU, was a process of creating duty-free trade among members and creating a common external tariff through a customs union. Further product market integration involved more harmonization of regulations, and addressing issues on competition policy and gov't procurement.

Part 2. Briefly answer the following questions or provide the requested information. Relate your answers to concepts discussed in class and avoid unnecessary information. (45 points)

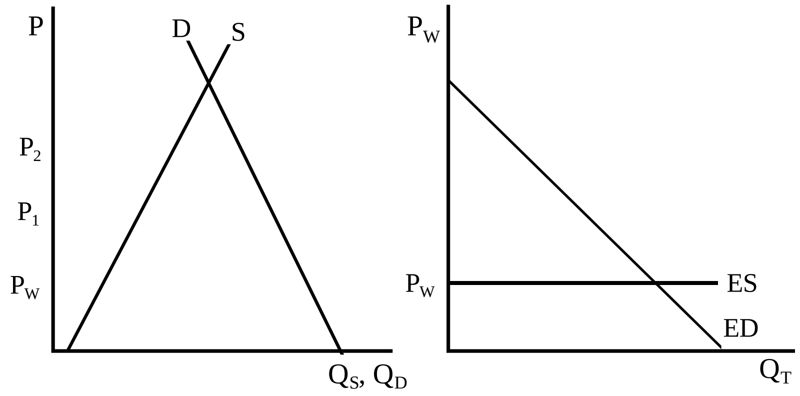
2.1 Using the graphs provided, think about the inter-play between domestic support (DS) and market access (MA) restrictions in the case of a small, net importing country when answering the following: (15 points)

2.1.1 Suppose a policy combination such that price is supported at P_1, but producer income per unit is guaranteed at an equivalent of P_2. What is the equilibrium and the welfare effects (relative to a free trade benchmark)? How would that differ from a price support at P_2? Explain in terms of (a) the policy mix, (b) the effect on trade and (c) the welfare effects. Use a chart like the one below if it helps. (8 pts)

	Q_D	Q_S	$Q_{Imported}$	Δ CS	Δ PS	Δ G	Δ NSW
Combination regime							
Price support regime							

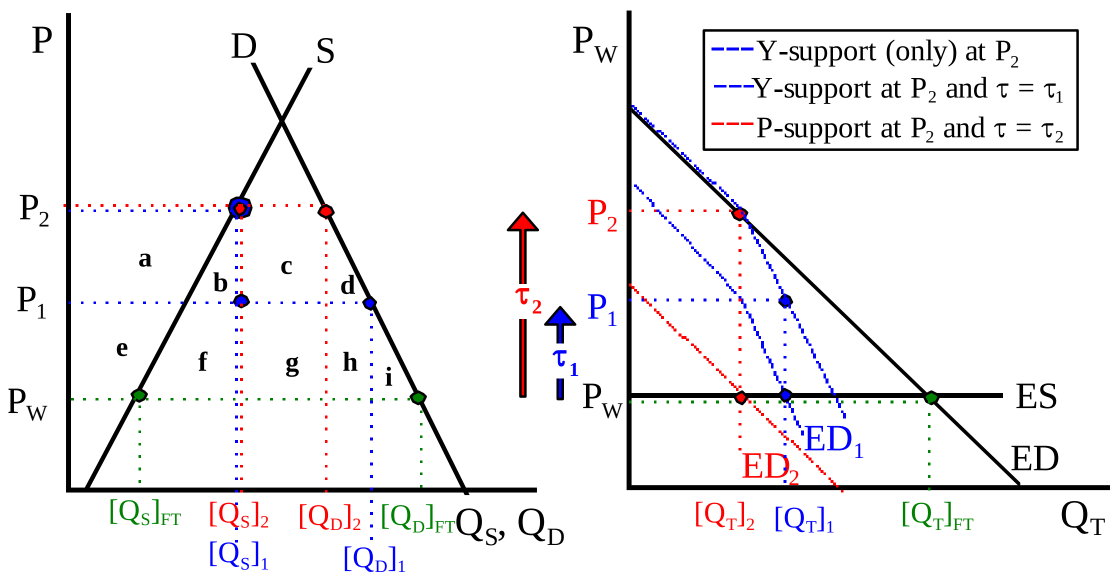
2.1.2 What type of DS (e.g., green, yellow, blue) is: (a) the price support; (b) the income support as described in the policy combination? Explain. (4 pts)

2.1.3 Compute the aggregate measure of support through an algebraic expression of the value *or* by showing the relevant areas representing the value on a graph. (3 pts)



2.1.1. (a) Policy mix:
P-support is amber box DS. It requires MA protection to prevent ↑ imports that → ↓ P < the P-support. Y-support is DS that can be green, blue or amber box. It does not require MA protection. Under the combination of P- and Y-support, the P-support, $P_1 - P_W$, requires MA tariff protection equivalent to $P_1 - P_W = \tau_1$. The Y-support, which does not require a ↓ Q_S, is coupled; therefore, it is amber box DS, but does not require additional MA protection. Under a P-support regime, $P_2 - P_W$, MA protection is required equivalent to $P_2 - P_W = \tau_2$ such that $\tau_2 > \tau_1$.

2.1.1	(b) Economic effects			(c) Welfare effects			
	Q_D	Q_S	Q_M	Δ CS	Δ PS	Δ G	Δ NSW
P, Y support	$[Q_D]_1$	$[Q_S]_1$	$[Q_T]_1$	- (e+f+g+h+i)	+(a+e)	- (a+b) + (g)	- (b+f) - (h+i)
P-support	$[Q_D]_2$	$[Q_S]_1$ $[Q_S]_2$	$[Q_T]_2$	- (a+b+c+d) - (e+f+g+h+i)	+(a+e)	+ (c+g)	- (b+f) - (d+h+i)



2.1.2 Type of domestic support
Under the combination regime, the P-support is amber, and the Y-support is also amber box because it is semi-decoupled support which is tied to production without a requirement to ↓ Q_S. So, both the P- and Y-support under the combination regime is amber box. Under a P-support regime, the entire amount of producer support is amber box.

2.1.3 Aggregate measure of support (AMS)
Because under both regimes the DS is of the amber box type and the level of production is the same, $[Q_S]_1 = [Q_S]_2$, the value of AMS is equivalent. Under the combined policy regime, the subsidy equivalents of the P- and Y-support are as follows:

Price support: $[P_1 – P_W] \times [Q_S]_1 = (e+f)$
Income support: $[P_2 – P_1] \times [Q_S]_1 = (a+b)$
AMS: $[P_2 – P_W] \times [Q_S]_1 = (a+b+e+f)$, i.e.,the sum of the P- and Y-support.

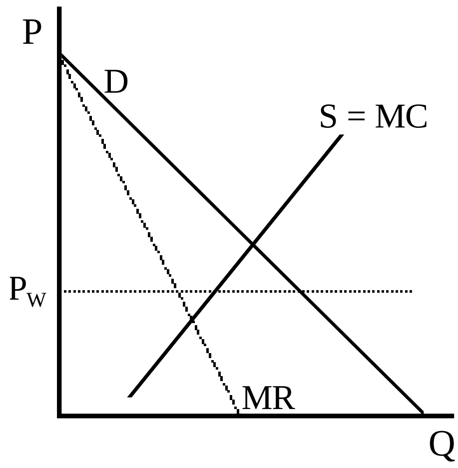
Under the P-support regime, the AMS value would be the same but the support is all P-support.

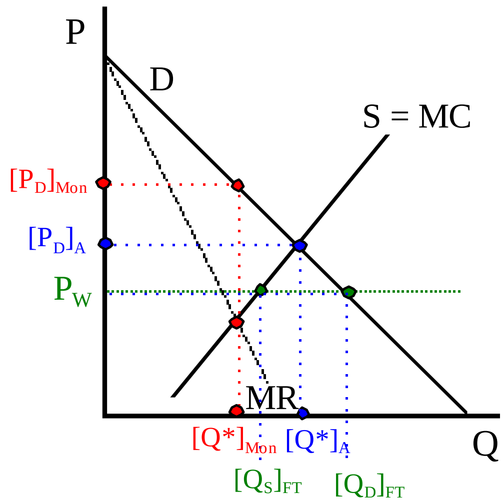
2.2 Suppose a country's government created a domestic monopoly as a means to give a domestic firm space to participate in an industry (i.e., the infant-industry argument). To do so, the government provided market access protection and/or did not enforce competition regulations. Using the graph provided, think about the inter-play of market access restrictions and competition when answering the following questions: (15 points)

2.2.1 Explain/compare the different equilibrium price and quantity combinations under free trade, competitive autarky, and a closed economy under a monopoly. (9 pts)

2.2.2 If the monopoly was given the necessary trade policy protection, the firm could dump its exports on the international market. Show or explain the necessary trade policy regime that would result in a dumping scenario. (6 pts)

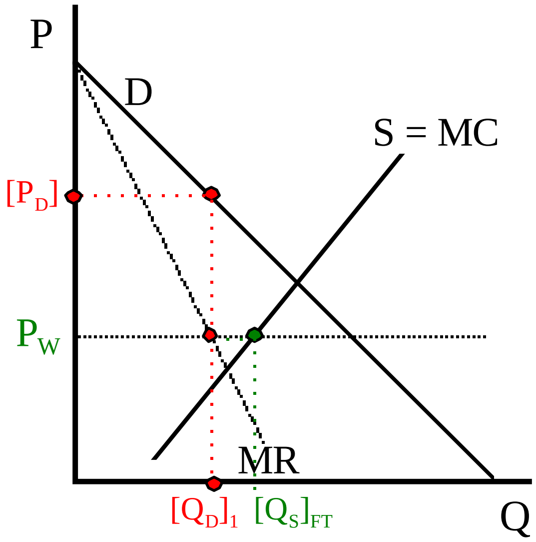
2.2.1 Alternative eqlbm solutions
<u>FT:</u> the monopoly is not provided any protection and is subject to import competition. Monopoly power cannot be exercised and the eqlbm is determined by P_W such that $[Q_S]_{FT} = D(P_W) > [Q_S]_{FT} = S(P_W)$ and the country imports, $M = [Q_D]_{FT} - [Q_S]_{FT}$.
<u>Competitive autarky</u>: the monopoly is regulated so that it cannot exercise monopoly power, but has tariff protection equal to $[P_D]_A - P_W$, allowing the firm to supply the entire market at the intersection of S=MC and D, i.e., $[P_D]_A$ such that $[Q_S*]_A = [Q_D*]_A$.
<u>Monopoly:</u> the firm is unregulated by competition authorities, allowing the firm to max π by supplying the entire mkt at S=MC = MR, and charging consumers $[P_D]_{Mon}$ such that $[Q_S*]_{Mon} = [Q_D*]_{Mon}$. The eqlbm would require tariff protection is equal to $[P_D]_{Mon} - P_W$.





2.2.2 Case where monopolist price discriminates and dumps (export) on the int'al market.
If the firm is to price discriminate and dump, then it would sell the product on the domestic market at a price higher than on the international market, i.e., $P_D > P_W$. The monopoly will produce according to the world price, $[Q_S]_1 = [Q_S]_{FT}$, but will charge the highest price possible in the domestic market and export the surplus, $[Q_S]_{FT} - [Q_D]_1$, at the world price. The amount supplied to the domestic market, $[Q_D]_1$, is lower than that under the closed

profit maximizing monopoly case. For this equilibrium to be possible, tariff protection equal to $[P_D] - P_W = \tau_0$ would be necessary.



2.3 Suppose the government decrees a new domestic regulation that gives producers or exporters of a specific product a tax break (an exemption from having to pay a domestic tax) when the good is exported. When the same good is sold on the domestic market producers must pay the tax. Answer the following questions: (15 points)

2.3.1 What is the economic implication of such a regulatory regime? Explain. (5 pts)

Define subsidy criteria: (1) transfer (in this case not requiring a payment is the transfer), (2) by the gov't (i.e., the gov't is not collecting the payment), such that (3) a benefit is conferred (the value of the tax credit). All three conditions are met. The regulatory regime, a tax credit specific to exported goods (specificity), would serve as an export subsidy. The intention would be to provide producer support through the ability to export the surplus on the world market.

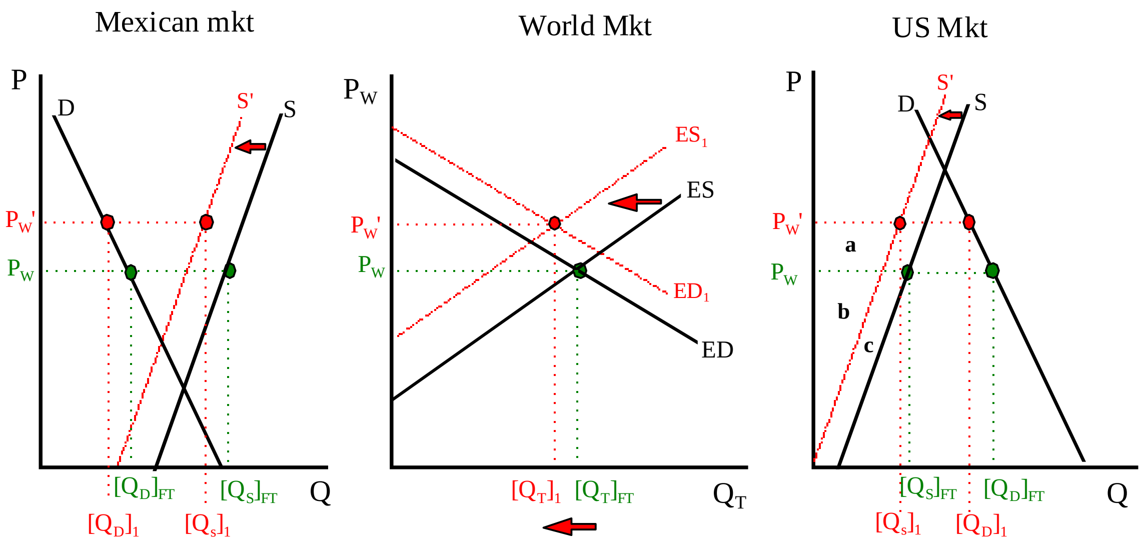
2.3.2 Would WTO member countries be able to challenge such a domestic regulation if the product is a good? What if this was a service instead? Explain. (10 pts)

WTO members would be able to challenge such a domestic regulation. If the product was an industrial good, then it would be prohibited. If the good was an agricultural product, then it would have to be included in the ES value and the volume subject to ES volume commitments.
If the product was a service instead, then it could not be as easily challenged. In the context of trade in services under the WTO, subsidies are not defined and regulations are not considered to be trade policy. The regulation, if it were scheduled in the commitments, could be notified as a limitation on market access or national treatment.

Part 3. Answer the questions related to the trade policy scenario described in the paragraph below. Be specific and explain your answers to the best of your ability. Label your graph(s) clearly and explain them. Define concepts you think will support your answer. (30 points)

The multilateral trading system was created with an objective of reducing or eliminating barriers to trade, including tariffs, quotas and other identifiable trade barriers. Changes in product standards resulting in new, non-harmonized labeling requirements are considered trade barriers. An example of a unilateral labeling requirement that has attracted attention as a non-tariff barrier is the US dolphin-safe tuna case, affecting Mexican tuna exports to the US market. Assume: a two-country world where US and Mexico have large markets and the US is a net importer; both countries fish (i.e., produce) tuna; all tuna is certified properly (i.e., no cheating or corruption); and the certification-labeling regime results in additional costs to all producers, but Mexican producers are meeting a US standard. (30 points)

3.1 Use a simple trade model to show the following trade situations: (a) free trade of tuna without the certification-labeling regime; and (b) the effects of a labeling regime certifying that tuna is dolphin safe, without any other trade policy. (15 points)



In the diagram above, FT refers to the free trade regime without the regulatory requirement. The subscript 1 refers to the economic situation with the regulatory requirement. The cost of implementation and compliance imply a leftward shift in supply in both countries, which in turn, causes ES to shift to the left and the ED to the right. On the world market, if the shift in the ES is greater than ED, then quantity traded will decrease. This would be the case where the cost of compliance reduces trade and can be interpreted as protectionist.

3.2 Can your model say anything about whether the labeling regime is protectionism in disguise (i.e., a non-tariff barrier)? If so, what is the trade policy equivalent? (10 pts)

Yes, the model can say something about whether the labeling regime is protectionism in disguise. If it is known that the cost of implementation and compliance with the regulation is higher on the exporter (Mexico) than on the home country (US), then unilateral imposition of the regulation can reduce imports compared with a regime without the regulation. The diagram above shows this case, i.e., that trade decreases relative to the non-regulatory free trade regime. The result of the regulation in the case presented would be a non-tariff barrier that has a tariff equivalent in the importer's market of about $P_W' - P_W$. Whether there is a subsidy equivalent of the certification-labeling regime to US producers will depend on whether the value of (a) ><= (c) + cost of compliance. If (a) > (c) + cost of compliance, then US producers are better off and imports are reduced. The welfare benefits to dolphin resource is not included in the model above.

3.3 Explain whether this is an SPS or a TBT issue under the rules of the WTO. (5 pts)

The regulation is intended to protect a resource, the dolphin. Hence the regulation is an SPS-related requirement. However, in implementation it involves a TBT- requirement because it involves production (or fishing or harvesting) method. Labeling issues are also a TBT matter.

ECN 330 Exam Dec 2006

Part 1. Explain whether the following statements are true, false, or whether it depends. If depends is your answer, be sure to explain upon what it depends. (25 points)

1.1 In the context of Europe's integration, approximation of regulations was the same as harmonization because the objective became to form an economic union.

> F. First, approximation is not the same as harmonization. Second, harmonization is not necessarily the best way to pursue regulatory objectives even in a union. While the form of taxation might be harmonized (e.g., value-added tax at the point of consumption), the tax rates across countries are not the same and need not be the same.

1.2 The balance of trade and the terms of trade are concepts that are identical in meaning because they involve only transactions of goods or services that cross borders.

> F. First, the BOT refers to the net value of exports receipts and import payments for all int'al transactions of good and services. The TOT is the ratio of relative prices of exportables to importables. Second, trade in services should enter the BOP even when the consumption of the services occurs abroad (foreign tourists stay in a hotel).

1.3 Cross-subsidization by charging high prices to domestic consumers to finance exports at a lower price is an example of unfair trade because it is an export subsidy.

> F. Cross-subsidization of exports does not need to involve a gov't transfer, which implies it is neither a subsidy nor an export subsidy. An export subsidy requires a transfer from the gov't with an export performance objective.

1.4 The computation of aggregate measure of support captures both the non-border (i.e., the domestic effects) and the border subsidy measures of agricultural policy.

> T. Consider the case of price support by a net exporter. The AMS of a price support would include the domestic price support and the subsidy equivalent from the subsidy that would be required for the export of the surplus.

1.5 Suppose the government of a net exporting country is considering converting amber box price support to a blue box income support equivalent. The blue box support is less trade distorting because for the same level of domestic support the government can commit to a reduction in market access restriction and export subsidy.

> T. Even if the country were large, consumers would be allowed to face the world price. Hence, MA restrictions would not be required and the lower price to consumers would mean that more domestic consumption would reduce the surplus, implying lower subsidy volume and value.

Part 2. Briefly answer the following questions or respond to the specific statements. Relate your answers to concepts discussed in class and avoid unnecessary information (45 points)

2.1 WTO Agreements define and set out rules for the use of actions that an importing country can take against its trading partners in the event of "injury" or "threat of injury" to the domestic industry. Think about the economic behavior behind the trade situation and the objectives of a policy action when answering the following: (15 pts)

2.1.1 How does a safeguard measure differ from an anti-dumping measure? What is the significance of the difference(s) of the two measures? (10 pts)

> A safeguard measure is an import restriction taken by the gov't of an importing country based on the injury caused by the volume of imports (low prices, reduction in production and various related symptoms associated with $\downarrow Q_S$). An AD measure is an import restriction specifically designed to counteract the *unfair* behavior of an firm exporting to the country, i.e., dumping or selling below the price in the domestic mkt. The rate of the AD duty would be based on the margin of difference between the domestic price and the import price (less transport/transactions costs).

2.1.2 *List* the market factors that one would need to analyze to establish the cause of injury in the cases of a safeguard and an anti-dumping measure. (5 pts)

Injury by:	Safeguards	AD duty
Injury considerations involve similar issues, but the AD duty requires the determination that mkt factors are direct result of unfair practices by firm exporting to home country.		
$\downarrow P_D$	Is $\downarrow P_D$ a result of firm behavior or mkt factors? Was it int'al or domestic mkt factors: tech, S, D, policy or other mkt factors – Δ factor mkts)?	
$\uparrow Q_M$	Is $\uparrow Q_M$ the result of unfair P behavior causing domestic consumers to substitute away from "like" domestic goods? Was it mkt factors; what was the Q, P of imports not dumped (like goods from another country)?	
$\downarrow Q_S$	Must consider relative prodvty, capacity utilization, developments in tech at home and abroad, how similar is like product to imported good	
$\downarrow$ local mkt share	Was it trade restrictive practices of – and competition between – foreign and domestic producers? What causes $\downarrow$ mkt share by home producers?	
$\uparrow Q_D$ for foreign good	Goods not homogeneous. How similar/different are "like" products? Was there a change in the patterns of consumption?	

2.2 The economic theory behind the standard trade model predicts that trade liberalization under a multilateral trading system such as the WTO will result in economic convergence across markets (goods, services and factors) in member countries. Think about what convergence means when answering the following:

2.2.1 *List* reasons to explain why complete economic convergence might not occur in reality, even under free trade. Consider what the assumptions are. (5 pts)

Economic convergence under trade liberalization: LOOP, output price convergence and factor price equalization (i-parity, wage equalization) LOOP can be violated for many reasons: factor immobility; trade policy restrictions, domestic regs that restrict free flow of goods and services; regs restricting movement of K, L; services are non-tradable, D-side factors differ

2.2.2 Is economic convergence in an economic union different from convergence under trade liberalization? Keep in mind your list in 2.2.1 and be specific. (10 pts)

Economic convergence under an economic union: LOOP, output price convergence and factor price equalization (i-parity, wage equalization) Economic union: facilitate factor mobility; free movement of L, K; duty-free intra-union trade; common trade policy and customs operation; common regs (either approximated or harmonized); free movement of goods and services Under trade liberalization (free trade), output P convergence will force convergence of relative factor prices even if L, K not mobile internationally. Under a union, facilitation of L, K and common regs and trade policy should imply S-side factors are more common, policy/regulatory-side factors are more common, which should ensure greater convergence. However, D-side factors can still differ across union members.

2.3 The WTO operates on the basis of how the basic principles are applied over the trade areas that they cover (e.g., trade in goods and services). Think about how the most favored nation and national treatment principles are applied in the context of market access (MA) commitments on trade in goods and services when answering the following: (15 pts)

2.3.1 *List* the differences in the characteristics of goods and services. (10 pts)

Nature of services: • Intangibility – makes it difficult/impossible to apply trade policy • Non-storability – makes trade difficult across time/space/volume • Heterogeneity – makes it difficult/impossible to std-ize services; services are tailor-made; service contracts made with close collaboration with users/buyers • Jointness or non-separability – harder to separate prodn from consumption

2.3.2 Explain how a MA commitment on services differs from a MA commitment on goods and relate the differences to the characteristics that you listed in 2.3.1. (5 pts)

MA restrictions in goods are typically handled through tariffs/quotas but could also be affected by regs. Commitments are taken on tariffs and quotas (TRQs in the case of ag products). Regs affecting trade in goods must be least-trade distorting (social objectives are stripped of trade-restricting effects). MA restrictions on services involve regs which are not considered trade restrictions. MA commitments require specifying how regs affect limitations on MA and national treatment. MA commitments on goods are stricter than on services because of regulatory oversight required in services mkts (mkt failures: imperfect competition, the economics of networks, imperfect and asymmetric info, internalities and externalities). The nature of services characteristics is directly related.

Part 3. Answer questions related to the paragraph on domestic regulations and trade policy equivalence. Label graph(s) and explain. Define concepts to support your answer. (30 points)

Economists and trade lawyers agree that there can be equivalence in economic effect from the use of a domestic regulation and a trade policy measure. Under the rules of the WTO, governments can apply regulations over all sorts of economic activity. These are justified on the basis that the regulation achieves some social policy objective rather than trade protection.

3.1 Think about how the regulation of a good, service and an intellectual property can achieve (a) some social policy objective, (b) state whether the regulation has a trade-policy equivalent, and (c) argue whether the regulation would violate WTO rules for the following types of domestic regulations: e.g., a technical barrier to trade (TBT), a trade-related investment measure (TRIMs), a regulation affecting a service market, and a regulation on trade-related intellectual property (TRIPs). Formulate your answer in a chart as provided below, or at least structure your answer such that it includes the relevant info for each type of regulation. (20 pt)

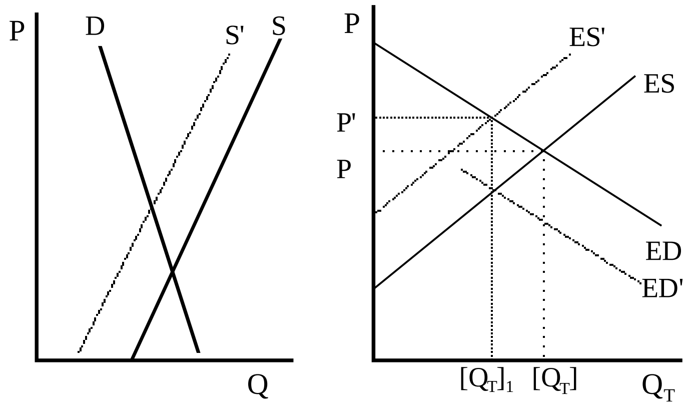
Domestic regulation related to:	Column 1	Column 2	Column 3
	Give an example of a regulation achieving a relevant social policy objective	What is the trade policy equivalent of the regulation?	Does the regulation violate a WTO rule?
TBT			
TRIMs			
Service			
TRIPs			

Domestic regulation related to:	Column 1	Column 2	Column 3
	Example of a reg achieving a relevant social policy objective	Trade policy equivalent of the regulation	Does the regulation violate a WTO rule?
TBT	TBT regs involve product characteristics, definition, prodn/processing stds, methods; product stds Where int'al stds or definitions exist, WTO member countries are strongly encouraged to adopt.	Unique prodn methods or setting higher product stds can increase in cost of prodn; a tariff can have similar P and Q_T effects.	Depends on the example. TBT-related regs need to address specific social issues without acting as trade protection.
TRIMs	Regs that either encourage or discourage FDI Example in class was a local content requirement	Could either have a subsidy, tariff or quota effect or exchange rate manipulation; local content requirement is like a proportional quota on factor imports	TRIMs violate WTO rules; violate either use of an illegal subsidy, quotas, MFN or nat'al treatment
Service	Regs affecting service provider(s) and/or provision of the services	Restrictions on MA or national treatment can either act as a quota or tariff	Regs on services are not considered trade restrictions even if they have that effect
Intellectual property	Regs on the protection and enforcement of IP property (patents, trademark, copyright)	Granting exclusivity is essentially a ban/quota on competition; selling licenses is similar to rent collection	WTO-rules on regs for IP protection and enforcement are example of min harmonized regs

3.2 Choose an example from column 1 in part 3.1, and explain how the domestic regulation has equivalent trade effects to the trade policy you identify in column 2. Develop a simple trade model to support how trade policy effects are equivalent to the regulation. (10 pts)

Answer will depend on the examples chosen. Example. TBT reg requires the use of high-quality material in a processed food (durum wheat for pasta). The higher cost input to produce pasta may be like a tax on the foreign producer of pasta. All local producers produce according to the product std already. But the foreigner to sell in the home mkt might have to produce the higher quality pasta only for home mkt. This could be similar to a tariff effect.

The case of a tariff would cause ED to shift to ED', reducing Q_T and ↑ P in the importer's mkt. The TBT reg could ↓ES to ES' on acct of ↑ cost of exporting to importer's mkt (↓S to S'). This reduces Q_T and ↑ P in importer's mkt.



May 2006 Exam re-take -- Summary Solutions

Part 1. Explain whether the statement is true, false or whether it depends. (25 points)

1.1. Suppose two countries constituting a free trade area have agreed to form a customs union. The common trade regime required by members of such a customs union would imply that rules of origin are no longer an economic issue.

T/D. Under a FTA, ROO are more important because each member has different trade policy relative to 3rd country trading partners. Trade diversion results by importing from a 3rd country to trade duty-free between members of the FTA. Under a CU, this sort of diversion does not occur; nevertheless, intra-union trade could still be required to have some specified % local content, which would require ROO.

1.2. Consider the potential effect that domestic regulations have on trade in goods and services. The WTO principle requiring national treatment implies that multilateral trade in services has become more liberal than trade in goods.

F. It is in general true that services trade is affected to a greater extent by domestic regulations because of the nature/characteristics of a service. However, market access and national treatment commitments under trade in services do not go as far as under trade in goods.

1.3. Under WTO rules, member countries are required to adopt international food safety standards because international standards are backed by scientific evidence.

F. Members are only encouraged to adopt international stds where appropriate. However, national standards can be stricter than international stds when scientific evidence exists to justify a stricter measure. Nevertheless, justifying a stricter national standard when the international community has agreed to what constitutes safety will be difficult to prove.

1.4. The legal definition of non-discrimination is clear under the WTO rules, e.g., a tariff of 20% or a specific tariff of 20 kr/unit is applied to all trading partners in exactly the same manner. However, from an economic perspective, the application of a specific tariff would, in general, be inconsistent with the principle of non-discrimination.

T. Consider a 25 kr/unit tax on goods costing 50 kr/unit and 100 kr/unit, respective. A 25 kr/nit tax on the good that costs 50 kr at the border would constitutes a 50% tax. The 25 kr/unit on the good costing 100 kr at the border would only constitute a 25% tax. Hence the effect would be discriminatory against the lower cost good and in favor of the higher cost good. The ad valorem tax would be neutral with respect to the relative price of the goods.

1.5. A countervailing duty applied against an export subsidy is more straightforward than an anti-dumping duty applied against an exporter than sells a good in a foreign market at a lower price than in its home market.

T. A CVD is applied on a good that has been subsidized by another country in violation of trade rules. An AD duty is applied in the case described above, but selling a good abroad at a lower price does not necessarily imply "unfair" trade behavior because it can represent normal business practice.

Part 2. Answer the following questions or respond to the specific statements. (45 pts)

2.1. Consider the logic behind trade liberalization from a neoclassical economist's perspective and reflect on why most trade liberalization is based on reciprocity (bilateral or multilateral) rather than unilateral liberalization. (15 pts)

2.1.1 Under a standard trade model (either partial or general equilibrium), what are the welfare implications of unilateral trade liberalization for the country liberalizing? Be specific. (10 points)

Trade liberalization increases SW in both the import and export sector. Show either welfare effects in two partial eqlbm models or under general eqlbm.

2.1.2 Keep in mind your result in 2.1.1 to explain why most trade liberalization is based on reciprocal arrangement rather than unilateral trade. (5 pts)

Politically, the losers from trade liberalization are more clearly identifiable because the costs are concentrated among the relative few. Reciprocity allows a government to mobilize winners from trade liberalization by receiving concessions from trading partners in exchange for having to liberalize the domestic economy.

2.2. Consider the WTO definition (or criteria) for a subsidy when establishing whether an export credit guarantee program is a form of export subsidy or not. (The export credit guarantee program is loan that is backed by (i.e., insured by) the exporter's government in the event an importer cannot repay the exporter.)

2.2.1 *List* the criteria for a subsidy under WTO rules. (5 pts)

- Transfer of income
- Involves government body
- Transfer confers a benefit
- Specificity condition: export objective or import substitution objective

2.2.2 Keeping in mind your answer in 2.2.1, explain whether an export credit guarantee program would constitute an export subsidy. (10 pts)

D. The definition is satisfied if and when the importer defaults on the loan. If the importer does not default then it is debatable whether a benefit is conferred. If there is never a default, then this begs the question as to why government needs to take the risk of the guarantee.

2.3. Under the Agreement on Agriculture, decoupled income support is listed as a green box measure. Consider the meaning of the categories of agricultural subsidies (green, amber and blue box) when answering the following:

2.3.1 Why would a decoupled income support be considered green box support? (7 pts)

It is argued to be neutral w.r.t. production, consumption and trade. Over time, it should promote a restructuring of the agricultural sector toward more efficient production. Inefficient farmers will leave the sector and efficient farmers will remain. Hence the price signal will be more efficient over time.

2.3.2 What is the principle difference between price and income support for an economist and how is this difference treated under the rules of the WTO? (8 pts)

Price supports, amber box, directly affect producer and consumer decisions. Income support do not, except blue box type income support which still affect production.

Part 3. Answer the questions related to the scenario described in the paragraph. Use graphs to support your answers when appropriate/requested. Be neat, label graphs, list key assumptions and define concepts to support your explanations. (30 points)

Recently, the governments of developing countries have been arguing for more trade rather than aid from the more developed countries. As a result, the positions of the trade negotiation coalitions that involve developing countries called for substantial reductions in tariffs and/or in reductions of subsidies in agriculture.

Consider two types of net agricultural exporting developing countries. Type one receives preferential market access to a developed country (either the US or the EU market) and type two does not receive preferential market access. Consider the economic effects (e.g., price changes, specialization and trade patterns) of a preferential trade agreement, relative to trade under multilateral rules. In addition, keep in mind the current WTO trade negotiations and how further liberalization will result in new economic effects when answering the following:

3.1 *List* the differences between preferential market access and market access under the multilateral trading system of the WTO and explain the key difference(s) from an economic perspective. Focus on the criteria presented in the table below and structure your answer accordingly. (15 points)

<table>
<tr><th rowspan="2">Criteria/objective</th><th colspan="2">Trade liberalization based on:</th></tr>
<tr><th>Preferential trade arrangement</th><th>Multilateral trading system</th></tr>
<tr><td rowspan="2">Static gains from trade (i.e., short-run effects of trade liberalization)</td><td></td><td></td></tr>
<tr><td colspan="2">Explain the differences.</td></tr>
<tr><td rowspan="2">Ability to achieve greater trade liberalization</td><td></td><td></td></tr>
<tr><td colspan="2">Explain the differences.</td></tr>
<tr><td rowspan="2">Dynamic gains from trade (i.e., long-run effects of trade liberalization)</td><td></td><td></td></tr>
<tr><td colspan="2">Explain the differences.</td></tr>
</table>

Assumption: the LDC is a small country exporter

<table>
<tr><td rowspan="2">Criteria/objective</td><td colspan="2">Trade liberalization based on:</td></tr>
<tr><td>Preferential trade arrangement</td><td>Multilateral trading system</td></tr>
<tr><td rowspan="2">Static gains from trade (i.e., short-run effects of trade liberalization)</td><td>Price in the importing country is higher than in LDC mkt. Should result in higher prodn and exports. Process of specialization can occur.</td><td>Same as under preferential trade, but trade diversion is not a possibility under MFN.</td></tr>
<tr><td colspan="2">Difference is minimal if specialization process is not a function of discrimination. If there is an infant industry argument, then the PTA can give the LDC the possibility of learning to trade and market internationally with the aid of the margin of protection. If trade diversion occurs, then pattern of specialization can be beneficial only in the S-R.</td></tr>
<tr><td rowspan="2">Ability to achieve greater trade liberalization</td><td>Process of specialization is defined only within the context of the country offering the preferential treatment</td><td>Global trading patters will reflect global scarcity and preferences; liberalization is more consistent with WTO rules of non-discrimination</td></tr>
<tr><td colspan="2">Differences: Preferential trade might provide the LDC with lower tariffs than under MFN, but MA can still be restricted through quotas. Preferential trade can divert trade. LDC is not guaranteed that the country granting preferences will change the terms later because the country granting preferences define the conditions. Under the WTO, commitments are taken.</td></tr>
<tr><td rowspan="2">Dynamic gains from trade (i.e., long-run effects of trade liberalization)</td><td></td><td></td></tr>
<tr><td colspan="2">The long-term effects of trade relate to the relationship of liberalization to investment, productivity, structural change in the production, linkages of production to value-added activity, etc. Answer depends on what is discussed in terms of whether preferential treatment or MFN status is able to provide the LDC with the possibility of and the extent to which specialization occurs and engages in trade. If the trade helped the LDC only because of the preferential treatment, then the L-R effects will be minimal because trade is not sustainable.</td></tr>
</table>

3.2. Would the WTO negotiating position of a Type one developing country differ from a Type two developing country? Explain and be specific. (15 points)

Type 1 LDC would have an interest in protecting the tariff margin in order to protect their share of the market and continue earning the higher price in the importer's market. A type 2 LDC would be interested in seeing increased market access and lower subsidies in the importing country. This would allow the LDC exporter to profit the most from its comparative advantage in ag products.

Summary Solutions for Final Exam ECN 330 Dec 2005

Part 1. Explain whether the statement is true, false or whether it depends. (25 points)

1.1. Of the four modes in which services trade can be provided, the cross border mode of providing services is the most important in terms of international commerce because it most resembles trade in goods.

F. Commercial presence is the most important as it is increasingly common for service providers to maintain a presence through FDI. Cross-border services can also be supported through commercial presence.

1.2. A quota is inconsistent with the WTO principle of non-discrimination regardless of whether the quota is based on value or volume terms.

T/D. A binding quota will require some form of quota allocation. Some forms of quota allocation might be more efficient and approximate non-discrimination more effectively, but unless one country supplies the market or whether mkt shares are perfectly stable, then there is no way to allocate quotas in a non-discriminating manner.

1.3. The agreed definitions of dumping as a form of unfair trade practice are not based on a solid economic foundation; hence, a multilateral approach to competition rules are not practical.

T. Dumping is either defined as selling below cost of prodn or selling abroad at a lower price than in the home market. However, whether such actions constitutes unfair trade practice by a firm is not based on a solid economic foundation. There are many legitimate business factors which might explain such behavior.

1.4. Safety regulations for toys or safety requirements for a product such as an automobile could either be an SPS or TBT measure.

F. Product safety regulations are considered technical regulations and are not directly related to human health. Hence, these would be TBT objectives and not SPS objectives.

1.5. A limitation on the number of entrants (i.e., private firms) participating in some service sector would be a limitation on national treatment and must be notified in the country's service schedule.

F. A limitation on the number of entrants (foreign or local firms) would be a limitation on market access not national treatment because the limitation affects locals as well as foreigners.

Part 2. Answer each of the following questions or respond to the specific statements. (45 ps)

2.1. Consider the various stages of economic integration and reflect on what the policy objectives are when answering the following: (15 points)

2.1.1 How does the creation of a customs union differ from achieving market integration?

Customs union	Market integration
FTA: zero w/in group tariffs and no quotas CET: common tariff to non-members; common customs approaches Common regs not a pre-condition	Requires FTA Free trade in goods Free trade in services Requires CU and CET Requires more by way of common regs SPS regs to facilitate trade in goods TBT regs to facilitate trade in goods Approx or harmonization of regs to facilitate trade in services Common competition policy

2.1.2 What role might a customs union play in achieving market integration? (10 pts)

A common customs administration can be the catalyst to common regs for SPS, TBT and other regs to facilitate trade in goods. If trade in services is covered (trucking regs, transport, etc), then this can be the start down the path of market integration.

2.2. Recall the definition of a subsidy and consider what the economic implications of a subsidy are when answering the following:

2.2.1 Explain how a subsidy can have net positive or negative effects for society. (5 pts)

Δ G $\rightarrow$ $\uparrow$ SW through $\downarrow$ DWLs and in large country case through Y-transfers to foreigners
Δ G $\rightarrow$ $\uparrow$ SW by correcting for some market failure such that G-transfer is < social benefit

2.2.2 Keeping in mind your answer in 2.2.1, would it be correct to say that a green box income support payment is regarded as having a net positive effect for society? Explain. (10 points)

Δ G $\rightarrow$ $\uparrow$ SW through green box decoupled support is possible. The transfer is not based on Q or P. The price is determined by market forces and the idea is that some producers will be forced to leave the industry and only the efficient will remain. The transfer, then, serves to ease the structural adjustment that occurs and the reallocation of resources (more optimal farm size and number of operators) is facilitated, which is welfare improving. Without the payment, small players would continue to operate in the industry and continue misallocating resources.

2.3. State trading monopolies, permitted under the WTO, pose a difficult challenge for trade negotiators. Think about the WTO principles and rules when answering the following:

2.3.1 Which WTO principles or rules are violated when a country has a monopoly importing or exporting enterprise? (5 points)

(*) non-discrimination	(*) national treatment
(*) reciprocity	(*) predictability
(*) transparency	(*) safeguards
(*) rules on use of quotas	(*) rules on use of subsidies

Could potentially violate any one of these principles or rules. The important factor is that domestic prices will not be same as world price. This implies that there are production and trade implications and income transfer implications (within the country, but perhaps between countries also).

2.3.2 What might be the motivation for having a state trading monopoly and how might market access restrictions reinforce the policy objective? (10 points)

	Exporting monopoly	Importing monopoly
Motivation	$\uparrow$ Q or $\uparrow$ revenue by restricting export	$\uparrow$ Q, revenue by restricting import
	Could also argue that having a monopoly exporting firm (mkting board) is a means to reduce risk and increase mkt power on world mkt	Could also argue that having a monopoly importing firm is a means to reduce risks associated with P fluctuations on world mkt or means to promote more domestic mkt stability
Effect of MA restrictions	For the monopoly to be a monopoly on the domestic market, MA restrictions are required. The choice of using a tariff or quota will depend on the motivation or the policy objective. Recall that tariffs and quotas are non-equivalent in the presence of a monopoly.	
	If objective is to allow local exporting firm to produce more, then tariff protection less than monopoly price can achieve this. Quota is not needed; provides too much protection.	If objective is to allow the local firm to produce more and give local production more revenue, then quota protection can be more effective; tariff can do the same.
Result	$P_D > P_W$; monopoly rents are either captured by the firm or gov't	$P_D > P_W$; monopoly rents are either captured by the firm or gov't
	If objective is to increase revenue, then restricting production and export is necessary. Large country situation (e.g., OPEC) allows for income transfers from importer to exporter.	Could also consider optimal tax case.
Result	$P_W > P_D$; monopoly rents	

Part 3. Answer the questions related to the scenario described in the paragraph. Use graphs to support your answers when appropriate/requested. (30 points)

In the Ministerial Declaration of the Doha Ministerial Conference in 2001, member countries of the WTO decided on a trade negotiation agenda that required market access (MA) restrictions and domestic support (DS) levels to be reduced and that export subsidies(ES) would be phased out. The details of the reductions and ES phase out, however, were left for members to work out through successive rounds of negotiation.

Suppose the current state of the negotiations for cuts in MS and DS are as reported in the following table. The bands relate to differences in the existing bound rates (of tariffs and domestic support). The proposed range of cuts depends on the initial bound rates on tariffs and domestic support. (The info in the table is for you to consider. Use it if it is relevant for your answer.)

MA:	Range of existing bound tariffs	Proposed range of cuts in tariffs
Band 1	0% - 30%	20-65%
Band 2	30% - 60%	30-75%
Band 3	60% - 90%	35-85%
Band 4	> 90%	45-90%
DS:	Bound support levels in US$ billion	Proposed range of cuts in support
Band 1	0-10	31% - 70%
Band 2	10-60	53% - 75%
Band 3	> 60	70% - 80%

3.1. Given that the Doha Ministerial Conference was dubbed a Development Agenda, which is more important for developing countries, those with a comparative advantage in the agricultural, to have liberalized by developed countries, MA or DS? Explain why you think liberalization of one might be relatively more important than the other. Are there any short-term or long-term implications? Be specific. Use a graph(s) to support your answer. Make explicit whatever assumptions you require. [Hint: Recall that a country may have negotiated MA and/or DS bound rates that are currently above the applied rates.] (15 points)

MA	DS
MA restrictions limit imports into North. The good thing about MA restrictions is that they give opportunity for preferential access to LDCs. Problem is that LDCs are least able to fill their quotas. MA restrict direct competition with importers, esp TRQs.	DS depending on how the support is given does not necessarily require MA restrictions (e.g., blue box or green box). Good thing is that income support is more transparent and will put pressure internally on what ag policy should be and how much it should cost society. DS rather than MA restrictions still allow consumers to choice whether local products are really preferred to foreign products. DS can allow for more direct competition with importers. Disadvantage is that preferential treatment is more difficult. Support to LDCs would also have to come in the form of a subsidy.
Show graph of a mkt where $P_D > P_W$; show what the MA protection is and the DS equivalent. For DS case, can show an example of price versus income support where DS supports production at previous levels and still permits increased mkt access.	

3.2. During the Cancun Ministerial Conference in 2003, there was some disagreement about what the elimination of export subsidies (i.e., phasing out) meant. For which type of country would the elimination of export subsidies be more of a binding constraint, a net importer or net exporter? Explain and be specific. Use a graph(s) to support your answer. Make explicit whatever assumptions you require. (15 points)

ES by net-exporting country	ES by net-importing country
ES in such a context displaces commercial export and contributes to additional volume exported. Evidence is that net-exporters did not use the full quota that was negotiated. DS would have been a more efficient form of transfer if the real motivation was not to increase exports.	ES in such a context was a means of supporting domestic internal prices which were often much higher than the world price. Countries were more likely to fill or have higher fill rates of the quota that they negotiated. It is no surprise that the EU expressed some reluctance to fully eliminate the use of ES on "sensitive products".
Show the case of a net-exporter with an export subsidy.	Show the case of a net-importing country with a tariff supporting internal prices above the autarky price, i.e., trade reversal case.