

ECN 330 and IØ 300 EXAM FILE from Previous Years: 2000 - 04

ECN 330 Exam and Solutions **Dec 2004**

Part I. Explain whether the following statements are true, false, or whether it depends.

1. Under the WTO's multilateral trading system, the rules for the protection of intellectual property require more harmonization of regulations than the rules for trade in services.

T. GATS commitments requires only loose application in the sense that each country (1) chooses where to make commitments and (2) when commitments are made it only requires a specification on what the conditions are for foreign service providers relative to market access limitations and limitations of national treatment. Hence, under GATS there is no harmonization of regulations. In TRIPS, more uniformity in regs protecting trademarks, patents and copyright requires some minimum amount of harmonization.

2. An anticipated (i.e., expected) worsening of the terms of trade of a country implies that this will worsen the country's current account (i.e., the balance of trade) today.

D. If the country's currency is expected to ↓ in value into the future, it is not clear whether this signal will provoke an ↑ import orders today (i.e., ↑ import payments). Also, it is not clear whether trading partners will delay purchases today (i.e., ↓ export receipts) until the currency's value drops. Can focus on contracts/relations between importers and exporters, short-term price inelasticity in export demand and export supply, and the J-curve effect and the BOT.

3. The WTO Sanitary and Phytosanitary Agreement requires members to accept internationally agreed standards. This implies countries cannot have national standards that exceed the international standards.

F. Stds are set by individual countries but must be based on science and must be measurable, testable, etc. If/when int'l stds exist, WTO members are encouraged to adopt the stds to avoid challenges or trade disputes, but countries have the right to higher stds if science can provide a justification for the need.

4. Suppose a country forms a customs union with its regional partners. The welfare gains to the country from a customs union would be tied to trade creation and the welfare losses would be tied to trade diversion.

T. The welfare gains from a CU is the new trade that is encouraged from liberalizing among the member countries (duty free intra-union trade and more harmonized regs governing services). The costs are trade diversion resulting from lost trade with non-members of the union (especially if non-members are the low-cost suppliers and the common external tariff prices these suppliers out of the domestic market).

5. Under the rules of the WTO, licensing systems on imports or exports are disallowed because quotas are not permitted.

F. Licensing systems are allowed whether or not quotas are used. Licensing systems can be used to ensure that SPS or TBT concerns are met by exporters/importers.

Part II. Briefly answer each of the following questions or respond to the specific statements.

1. The 2001 WTO Ministerial meeting kicked off a comprehensive new round of trade negotiations called the Doha Development Agenda. However, disagreements among members forced new areas such as trade and investment off of the negotiation agenda. Keep in mind the role foreign direct investment (FDI) when answering the following questions: (15 pts)

- a. How is FDI currently treated under the rules on trade in goods (i.e., trade-related investment measures) and in services (i.e., General Agreement on Trade in Services)?
- b. Think about the logic and risks behind international capital markets. Are the current WTO rules covering investment consistent with the logic and risks? Explain.

Rules:	a. Foreign investment, WTO	b. Foreign investment theory
Trade in goods	Treated under TRIMs. Specifies conditions to prevent actions that divert foreign investment (subsidy to foreign firms to locate in the host country); or that put conditions of foreign investment that discriminates against foreign firm in that it violates national treatment (e.g., conditions of repatriation of profit, ownership limitations, requirement to transfer tech or that place conditions on where to sell, balance of payments constraints, use of foreign exchange, etc (all can divert trade)	Theory: int'l K mkt is good (i-parity, efficient allocation of K, portfolio diversification, etc). Foreign investment comes in as either FDI, portfolio I, lending, tech transfer or aid. The WTO does not have specific rules on lending or portfolio I (it is covered in financial services but countries do not have to make commitments); FDI is covered specifically on thru TRIMs and GATS. FDI is the least controversial in terms of the risks associated with int'l K flows. Portfolio I is more risky and fewer commitments are required under the WTO.
Trade in Services	Mode 3, commercial presence. Countries specify the conditions for foreign service providers and specific how national regs limit market access and nat'l treatment.	

2. Tariff bindings are argued to remove the maximum tariff uncertainty faced by exporters. However, in practice, there are many cases where a country's applied rate is less than the bound rate. Thus, some Member countries have argued that the current market access (MA) negotiations should start tariff reductions from the applied rates rather than the bound rate. Recall the basic WTO principles when explaining your answers to the MA-related questions:

- a. Should negotiators take notice when applied rates are lower than the bound rates?

Yes. First define the basic principles: (1) MFN - non-discrimination across trading partners; (2) nat'l treatment - non-discrimination in application of domestic regs; (3) predictability thru bindings; (4) transparency. If applied rates are lower than the bound rate, then it can be argued that the MFN rate was negotiated at too high a rate (unnecessary protection). Hence, the argument suggests that the ceiling should have been the applied rate. Having the extra space between the applied rate and the MFN rate means that the gov't would have the right and ability to change tariff rates at will, using the "water under the tariff" as a variable levy. Hence, excessive level of protection under the ceiling runs counter to both predictability and transparency even if MFN and nat'l treatment are not violated.

- b. Countries that were sensitive to agricultural imports negotiated the right to use tariff-quotas (TRQs). Could the use of safeguard measures be a better alternative to a TRQ?

Safeguard measures require the country to specify a domestic price floor (P_D) and a sensitive level of imports (Q_M). That is, when price falls below P_D then the gov't can raise tariffs to restore prices to the targeted price level. Or when the imported volume exceeds Q_M then the gov't can restrict imports to restore the desired level. Under the TRQ, fill rates were often less than 100% even at inflated in-quota levels. This meant that MA reduction commitments were not resulting in more trade. Having to use the safeguards would imply that at least MA commitments were binding (or more likely to be binding).

3. Suppose a country is susceptible to famine, and that the causes of famine are due to: (1) persistent periods of bad harvests (due to droughts), (2) a one-time, temporary siege or a blockade by a hostile power; or (3) a prolonged siege or blockade by a hostile power. Consider the risks associated with these scenarios when answering the following questions: (15 points)

- a. For which of the three scenarios is import protection an appropriate policy response?

Import protection would be most appropriate under a regime where there would be a prolonged siege or blockade by a hostile power. It would make sense for the gov't to promote self-sufficiency because it could not count on the ability or willingness of foreigners to supply the domestic mkt. (In addition to import protection, it would make sense to promote ag thru green box measures: research and development, promote storage, extension, etc.)

- b. What are possible alternative policy responses to the other two scenarios?

Persistent periods of bad harvests would make supply uncertain. Consumers would be better off with price stabilization policy (even though producers would be worse off). Gov't could improve SW thru the maintenance of a buffer stock and liberal trade regime. If a temporary siege is a risk, then diversification of importers is most appropriate. The country will need to purchase food cheaply and so if foreigners are the cheapest source), then it stands to reason that a liberal regime would be most useful to build a strategic stock of food.

Part III. Answer each of the questions related to the following scenario. (30 points)

Suppose a country has a liberal agricultural policy regime, but policymakers think that the world price is unacceptable for both domestic producers and consumers. Hence, government officials are negotiating with WTO members the right to use a policy regime that protects or supports agricultural producers, and that makes domestic prices of food for consumers lower than the world market price.

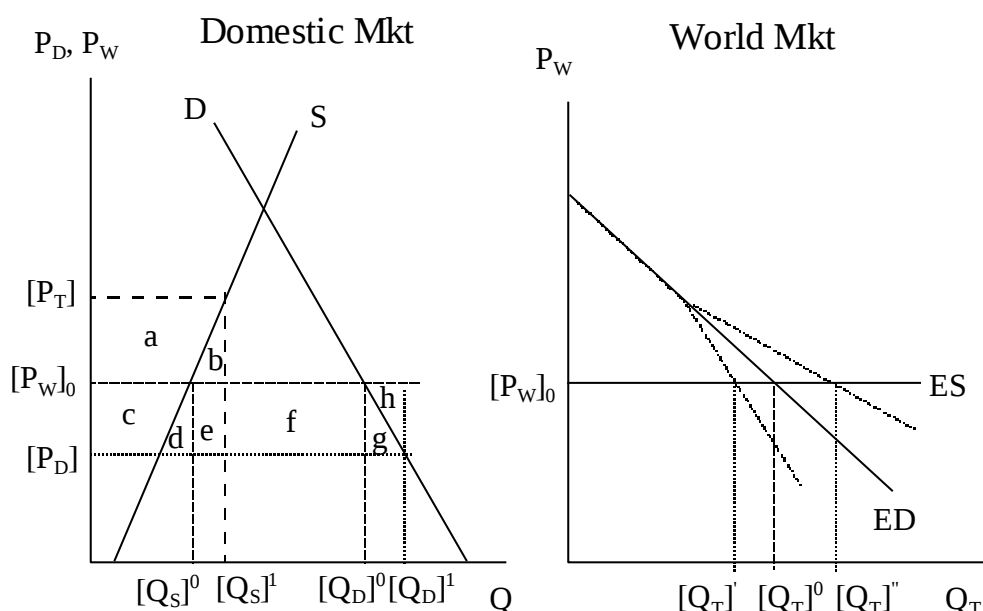
1. Describe a policy regime that characterizes the scenario above, and relate the new policy or set of policies to current WTO rules. Use a chart as below to structure your answer. (15 points)

- a. List the policy or set of policies needed to achieve the objectives in the scenario.
- b. What type of policy would each be under current WTO rules? Be specific.
- c. What must the government negotiate with WTO members to be allowed to apply the policy or set of policies? Give specific details and relate it to the graph in part 2.

a. Policy Set	b. Type of policy	c. WTO commitments
* Semi-decoupled Y-support to producers	Domestic support – blue box	Right to use blue box support because producers are guaranteed a price which is a per unit subsidy equal to $P_T - P_W$, but consumers are not required to pay domestic producers the higher price
* Consumption subsidy for consumers	Domestic support – green box	Because the subsidy is on the consumption of food regardless of origin, it is considered prodn-trade neutral. Additional subsidy with a per unit value of $P_W - P_D$.

Note: could have used tariff to support price at P_T . Could have also subsidized at a price above autarky but that would have made the modeling much more complicated. If so, then might have then have required to negotiate the right to export subsidies.

2. Present graph(s) of the agricultural market, from the perspective of this country only, under free trade, and then show the partial equilibrium changes reflecting the policy situation that you describe in part 1. Be sure that the graph(s) show the effects on production, consumption, trade and prices. Summarize the results in a chart as below. (15 pts)



From the graph: The objective of the policy for producers is to encourage more production, an $\uparrow Q$ to $[Q_S]^1$. At the same time, policymakers want to avoid an income transfer from consumers to producers, so the intent is more to support income rather than prices. Hence, semi-decoupled support is provided (rather than import protection). In consumption, policymakers chose to subsidize consumption regardless of origin, an $\uparrow$ consumption from $[Q_D]^0$ to $[Q_D]^1$. This would be consistent with national treatment and therefore is a green box measure. Import protection or taxation is not necessary since the intention is to also subsidize consumers (rather than tax them). The net trade effect depends on whether $\{[Q_D]^1 - [Q_S]^1\} \geq \{[Q_D]^0 - [Q_S]^0\}$. This will depend on elasticities of supply and demand in the domestic mkt. Small country case assumed for simplicity (large country case would imply the costs of subsidies would increase or decrease depending on the targeted level of production and consumption. The more trade is affected, the more the world price is affected, either increase or decrease.

	Areas in graph	Explanation/interpretation
ΔCS	$+(c+d+e+f+g)$	subsidy to consumers
ΔPS	$+(a)$	subsidy to producers (Y support)
ΔG	$-(a+b) - (c+d+e+f+g+h)$	Y-transfer to producers Y-transfer to consumers
ΔNSW	$-(b+h)$	DWLs in prodn and consumption
Values representing:		
CSE	$(c+d+e+f+g+h)$	Value of the consumption subsidy in terms of total transfer by gov't
AMS/PSE	$(a+b)$	Value of the production subsidy in terms of total transfer by gov't

ECN 330 Exam Dec 2003

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

1. The supply curve of agricultural products tend to be more price elastic in the long run. Therefore, trade protection will imply increasing welfare losses in the long run.

T. Supply curves in ag do tend to be more price inelastic in the long run as biological constraints are less binding over time. This implies that DWLs in production will tend to be greater as price protection from trade restrictions will allow domestic producers enough time to respond with increase production.

2. Much news has been made of the increase in the U.S. trade deficit to record levels and to the increasing foreign debt owed by the U.S. The U.S. imbalances and the weaknesses in the dollar is a primary factor explaining the recent increase in the price of gold.

T/D. The point is to make some association between foreigners' willingness to hold $\uparrow$ amounts of \$-denominated debt when the US imbalances become larger over time (-BOT, larger foreign debt, $\uparrow$ risk of default, expected future $\downarrow$ value of the \$) and holding gold as a reserve. Whether foreigners switch to gold or to € -denominated debt holdings is an empirical question. Recently it has been discussed whether there is an inverse relationship between uncertainty with the expectations of a $\downarrow$ value of the \$ and an $\uparrow$ price of gold (and holdings of gold as a reserve).

3. In accordance with the WTO Sanitary and Phytosanitary Agreement, risk preferences are more similar across countries because the safety standards must be based on science.

F. Safety stds must be based on science but each country is left to determine what level of safety is appropriate for them. This does not imply that risk preferences are more similar.

4. Suppose a government has as its objective to stabilize agricultural prices in its market and is opting for an import tariff to achieve the price stability. A specific tariff would be a more effective and more economically efficient tool relative to an ad valorem tariff.

F. Specific tariffs would stabilize P more than its initial ad valorem tariff equivalent, but the DWLs would be greater under the specific tariff. Show the case of changes in ES ($\downarrow$ and $\uparrow$) for a small country and you will see over the cycle DWLs are greater for an ad valorem tariff but the P-variation will be smaller). Could also have noted that P-stabilization depends on the source of P-instability (e.g., changes in supply or demand).

5. If a fixed exchange regime is successful, then perfect capital mobility is more likely.

T. If the fixed E is stable, then the interest rate associated with the fixed E is also stable. So, it must imply that (X-M) is offset more closely by K-flows. If R changed quite a lot, then that would put pressure on E away from the fixed rate (as this is a signal that i,E must change). FE or BP curve is horizontal and changes in IS are matched by changes in LM curve.

Part II. Briefly answer each of the following questions or respond to the specific statements. Relate your answers to concepts discussed in class and avoid unnecessary information! (45 pts)

1. One of the WTO Secretariat's duties is to report on the green box type subsidies which Member countries have listed under their agricultural schedules. Increasingly Member countries are arguing about what sorts of policies should fall under the green box category.

- a. Provide a *list* of green box type measures as allowed under the WTO Agreement on Agriculture. (5 points)

Examples of green box support: R+D, extension, infrastructure, buffer stocks, fully decoupled income support, disaster relief payments, consumer subsidies, environmental support, regional payments.

- b. Think about the definition of the green box and explain why two of the measures you listed above fall under that category. (10 points)

1. b. Must argue 2 things: ① that green box is prodn and trade neutral (improve ag structure, and ② that payment/support is divorced from Q decisions (fully decoupled Y-support), that consumer support does not violate nat'l treatment (i.e., it is subsidy on all food products, domestic and imported food), or that support helps overcome a mkt failure (e.g., extension, infrastructure, R+D, buffer stocks). Therefore $B > C$; welfare improving w/ respect to other social objectives.

2. Explain whether protectionist policies (in the form of a trade restriction and in terms of exchange rate management) have any effect on the balance of trade (i.e., in the short; in the long run) in a flexible exchange rate world. Structure your answer such that you provide information to complete the table below. Graphs are *not* required.

	Trade policy	Exchange rate management
a. Short term		
b. Long term		

Answer:

Recall: $E_{lc/fc} = P_{lc}/P_{fc}$ and $BOT = P_X \cdot X - E_{lc/fc} \cdot P_M \cdot M$ and focus on the effect on prices.

	Trade policy (import tariff)	↓ value of lc (buy fc or sell lc)	Result
S-R	↑ P of importable in lc terms but not in fc terms. So, ↓ import payments if D elastic in S-R (no contracts). If imports are subject to contracts (inelastic in S-R), then no Δ import payments but consumers pay tax to gov't. In this case, then no effect on BOT.	J-curve effect: -BOT in S-R; ↑ P of importable w/ inelastic D in the S-R (e.g., L-T contracts) makes import payments ↑, making -BOT worse. Also, depreciating lc means export receipts will ↓ possible making -BOT worse. This happens if P_M ↑ faster than P_X .	One could argue that the BOT is not improved by either policy intervention in short run.
L-R	In the L-R, if tariff → ↓ imports and import payments relative to export receipts, then E would ↓, reflecting the +BOT. The appreciation in lc will make lc P imports ↓ relative to lc P_X . As that happens, $E_{lc/fc} = P_{lc}/P_{fc}$ is restored (meaning the real exchange rate is restored (i.e., $E' = P_{lc} / P_{fc}$ such that $E' = E^0$) the exchange rate existing before the trade policy.	In time, ↑ P_X catches up with P_M (in lc terms), but the overall prices adjust also, restoring $E_{lc/fc} = P_{lc}/P_{fc}$. Δ P catch up (eg, ↑ $E_{lc/fc} = \uparrow P_{lc}/P_{fc}$) and the depreciation does not affect the BOT ("U-curve" effect).	This is again an argument that the policy intervention does not affect BOT in the long run as prices adjust to where they were prior to the policy intervention.
Conclusion: It is quite possible that other factors are causing a worsening of the BOT. The -BOT is a symptoms of bigger imbalances ($G \neq T$ and/or $S \neq I$).			

3. Some would argue that the WTO's General Agreement on Trade in Services (GATS) is harmful for the economies of developing countries because various government services would have to be privatized, affecting prices of utilities and the access to public services. (15 pts)

a. What commitments must members take under GATS? Give an example if appropriate.

WTO membership requires commitments on market access limitations and national treatment with regard to trade in services. That is, the country needed to specify what the limitations on market access are. The "bound rate" was effectively whatever restrictions a member country negotiated in terms of limiting a foreign service providers participation in the member's market or a limitation on the foreign service. Limitations on national treatment deal with treating a foreign service or the service provider in a manner that differs from the way regulations treat the local service providers or service.

b. Respond to the above statement that GATS is bad for developing countries. Be specific.

The WTO does not require any privatization or liberalization of any service. This was all negotiable. Obviously, the idea is to liberalize services, partially at least, especially in the case where services were already being performed by the private sector. This on the idea that more competition in services would result in lower prices and higher quality services for consumers (telecomm). Water and education, if public sector services, were not required to be privatized by the WTO. However, if the services were already being provided by the private sector, members would ask for the right to compete in those private markets (rather than to have private monopoly or oligopoly providers).

Part III. Answer each of the questions related to the following scenario. Be very specific and explain your answers to the best of your ability. Label your graph(s) clearly and explain your graph(s). (30 points)

Government intervention in agriculture has often been justified on the grounds that agricultural production is essential, but also because it is risky. Therefore, the market cannot by itself produce a satisfactory economic outcome. Suppose the country in question is a *small* net agricultural exporting country and the risk is that farm prices will be too low in the future. Answer the related questions with this in mind.

1. List the economic problem(s) associated with the risk of prices being too low in the future. List some risk management strategies that can be applied as an appropriate response under domestic support, trade policy, and under private sector initiatives. Formulate your answer to include the information that allows you to complete the table below. (10 points)

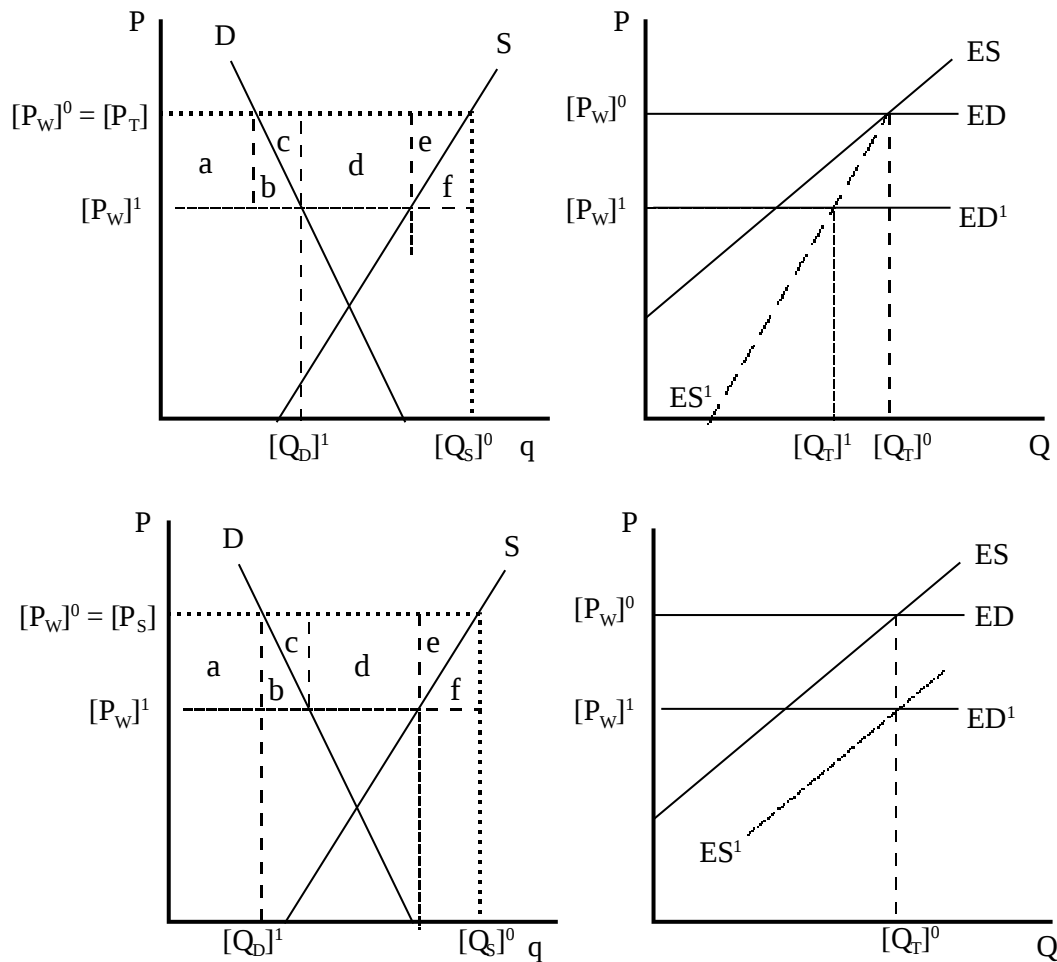
Type of risk	Economic problems (risk to whom or risk of what)	Risk management responses		
		Domestic support	Trade policy measures	Private sector initiatives
Farm prices too low				

1. Type of risk	Economic problems (risk to whom or of what)	Risk management responses		
		Domestic support	Trade policy measures	Private sector initiatives
Farm price too low	1. country diversifies prodn rather than specialize in a sector in which it has a comparative advantage 2. farm income is too low affecting ag credit, productivity 3. farm income is unstable 4. $\downarrow Q$ in ag reduces positive externalities associated with ag prodn.	<u>green box</u> : income safety net programs or fully decoupled income support; <u>amber box</u> : price supports, input subsidies, credit subsidies, or storage subsidies; <u>blue box</u> : semi-decoupled income payments	export subsidies in times when price is too low (and tariffs to support the higher price)	Storage programs; marketing boards; contracting price into the future; establish futures market

2. Provide a graph that would show how blue box type domestic support could help overcome the risk and an economic problem described above. Provide another graph to show how some trade policy could be employed to overcome the risk. Specify your assumptions. Are the welfare implications the same? Explain any differences. (15 points)

Welfare implications	Blue box measure	Trade policy measure
consumer surplus		
producer surplus		
government tax/subsidy		
net social welfare effect		
Explain any differences if they exist		

Blue box support



Export subsidy

Welfare	Blue box: semi-decoupled income support	Export subsidy
ΔCS	0	$-(a+b)$
ΔPS	$(a+b+c+d+e)$	$(a+b+c+d+e)$
ΔG	$-(a+b+c+d+e+f)$	$-(b+c+d+e+f)$
ΔNSW	$-(f)$	$-(b+f)$
Differences	Blue box support has (1) lower DWL (no DWL in consumption as consumers are not taxed in the process of supporting producers); (2) smaller subsidized export volume as $[Q_T]^0 > [Q_T]^1$ and value, but (3) gov't expenditures are greater.	

3. Could some green box measure have been used instead of the blue box type measure or the trade policy? If so, could that green box measure have been more favorable for the private sector to respond with initiatives of their own? Briefly explain. (5 points)

Fully decoupled income support could be more efficient in terms of its ability to transfer income to producers, but it might not address all of the "problems" listed in column one in the first table. Decoupled income support will not have the disadvantage of discouraging or "crowding out" private sector decision making, but it is not clear that all problems can be overcome in the short run either. Targeted domestic support can be an improvement over trade policy. Needed to relate it back to the private sector initiatives listed in part 1.

IØ 300 Exam Dec 2002

Part I. (30 points, 5 each) For the statements below, explain whether the statement is true, false or whether it depends. Defend your answer in a maximum of three sentences.

1. Suppose a country provides amber box domestic support to its farmers. Converting domestic support from the amber box to a blue box equivalent is welfare improving because of a consumer surplus gain and a reduction in government expenditures.

F. It is true that CS will improve, but it is not clear whether gov't expenditures $\uparrow \downarrow$ when policy is converted from amber to blue.

2. Under a currency board regime, the monetary policy of the country must complement its fiscal policy to keep the exchange rate at its targeted exchange rate.

F. Under a currency board, MP and FP are mostly surrendered to keep E strictly fixed. MS can change only when the country earns more of the reserve currency.

3. A net exporting country whose government subsidizes exports will also have to impose a restrictive market access regime.

T. An export subsidy requires that $P_{\text{domestic}} > P_{\text{world}}$ and so to keep out imports a tariff might be required. P_{domestic} is in effect a P-support and to protect the price support, a country will have to apply market access restrictions equal to the P-differential.

4. Exchange rate regimes are more liberal today relative to 30 years ago. As a result, more liberal capital markets means that speculative activity becomes more important.

T. A flexible E implies that E and interest rates can $\uparrow \downarrow$. Therefore, speculators will play a more important role in finding arbitrage opportunities. Recall i-parity.

5. Suppose a small importing country has a monopoly producer competing with imports. The size of the domestic market is the determining factor on whether or not some tariff protection will permit the firm to act as a monopoly.

D/F. A tariff can provide a domestic monopoly protection from imports but the rate of the tariff will determine whether the domestic monopoly will be able to behave as a monopoly. It can also be argued that if the monopoly is sufficiently large (and the world P is high relative to the importer's competitive eqblm situation) then a tariff can provide sufficient protection for the firm to behave as a monopoly.

6. Suppose agricultural prices are unstable from unstable import demand or export supply. An import quota would be more effective to stabilize prices than a tariff.

D/F. Consider the case of a small country. If the import quota is set when there is P-instability resulting from changes in ES, then domestic prices will be more stable. If instability in P is from ED, then an import quota will cause domestic prices to fluctuate to a greater extent.

Part II. (60 points total, 3 x 20 pts) Briefly answer the each of the following questions or respond to specific statements. Relate your answers to the concepts discussed in class.

1. Under the rules of the WTO, the tariff-rate quota (TRQ) was the instrument that was supposed to provide limited market access into countries which previously had very restrictive market access regimes. The idea was to gradually liberalize their sensitive markets by providing market access for a targeted volume of imports. Suppose a country negotiated a TRQ such that the targeted import volume was never met throughout the 1995-2000 implementation period. Keep this in mind when answering the following:

- a. List the factors that could explain why the targeted volume of imports was not met.
- b. Use one of the factors listed in part (a) to explain a negotiation strategy that might be taken by an exporting country. (Hint: think about the binding constraint of the TRQ.)

a. TRQ can be non-binding constraint if (1) demand decreases, (2) in-quota tariff is too high, (3) market access quota set too high, or (4) there are transactions costs.

b. If $\downarrow D$ is the reason, then market access restrictions are not necessary, reduce/eliminate tariffs; if in-quota tariff is too high lower this tariff and perhaps increase the quota; if quota set too high then reduce/eliminate tariffs; if there are transactions costs, then additional tariff reductions.

2. The balance of trade (BOT) is said to improve in the long run in response to a currency devaluation, but it worsens in the short run (i.e., a J-curve effect). One proposition for this result is that price changes are slow to adjust. A second proposition is that prices of the importable(s) increase faster than prices of the exportable(s). Consider the relationships among the exchange rate, BOT and changes in general prices when answering the following:

- a. List reasons to support the proposition that general prices adjust slowly (with a lag).
- b. Explain how the second proposition might be valid.

a. P-inelasticity in S-R (both on Q,C -side, P is contracted, buyer-seller relationships

b. P of our exportable (denominated in foreign currency) has gone down because the value of local currency decreases so export earnings tend to decrease; P of the importable (denominated in local currency) increases so import payments increase. This suggests that the BOT situation will worsen before it improves.

3. 'Feta' cheese is the latest food product to be registered as a Protected Designation of Origin (or a geographical indication as per the WTO TRIPs Agreement). This implies that only Greek producers can name a cheese as 'feta'. Non-Greek cheese manufacturers have 5 years to either change the name of that cheese or to cease production of it. The idea behind geographical indications and designation of origin is to encourage agricultural diversification, to protect both consumers and producers, and to bring more clarity to the market. Consider the arguments for why intellectual property should be subject to a multilateral trade agreement when answering the following:

- a. What are the economic implications of protecting a product's name on the grounds of geographical origin?
- b. Explain whether you think this improves the efficiency of the market or whether this is simply protectionism. Be specific.

a. IP protection is desirable b/c it provides a return to the inventor of the IP. The argument assumes some cost (e.g., high fixed costs, R+D) associated with creating the IP and so protection is afforded in order to allow a return to the investment or R+D. Protecting a name on a cheese that is well-known in the market place may or may not resemble the protection of a brand. The reason the Coke or Solo name is protected is that it is a unique product belonging to a specific company that has invested in the brand/product. There is a reward to the inventor and it prevents confusion for consumers. It represents some consistency in the product and the consumer knows what the product is (and is willing to pay for that product's name). Protecting a name on geographical origin might mean that there is less direct competition for feta cheese (an artificial reduction in Q which can have the effect of increasing P).

b. If identifying where a cheese came from was impt, then this could simply be done by noting that the Feta is from Greece or that the Feta is from Denmark and then the consumer can decide what to pay for it. By forcing Danish producers to rename the product probably sends conflicting signals to the market (rather than clarity). What stopped the Greeks from marketing their cheese as the only true and proper feta? Perhaps if the cheese was being invented today a brand name feta would be justified. Given that the mktplace already has an idea of what feta cheese is, consumers can distinguish from among the types of feta that are available on the market and pay for the difference if quality is perceived (such as paying for Coke rather than a generic cola). Feta, having been on the mkt for so long, hasn't really cost anything for the Greeks to create b/c it has long since been created. No mkt efficiency is being created and so this represents protectionism rather than correcting a mkt failure problem. The pt was to note the difference b/t IP protection as protection vs correcting mkt failure.

Part III. (60 points total, 2 x 30 points) Answer the questions related to the scenarios described in the paragraphs. Use graphs to support your answers when appropriate/requested. Be neat, label graphs, list key assumptions, and define concepts to support your explanations.

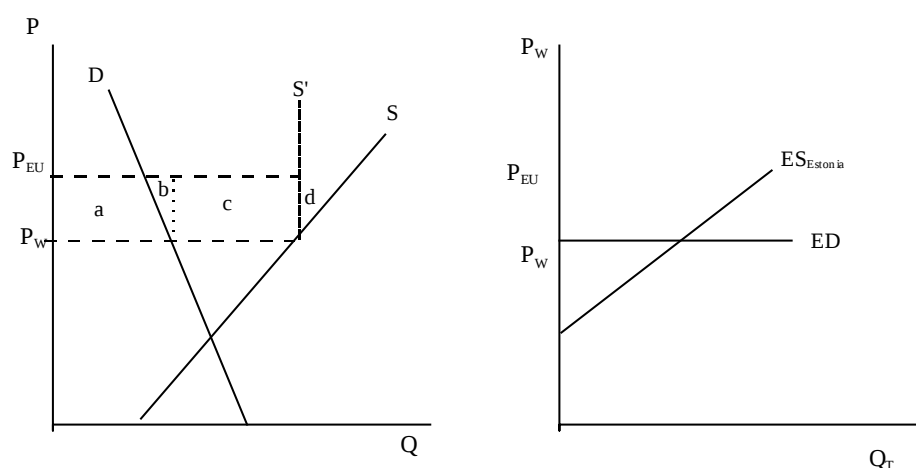
1. (30 points) In November 1999 Estonia became a WTO member. In its membership negotiations, Estonia committed herself to a liberal agricultural production and trade regime: no tariffs or non-tariff measures affecting agricultural imports; no subsidies or price controls on food; and no export subsidies. However, Estonia noted that she was also seeking European Union (EU) membership. Hence, import duties and domestic support would, in the future, be applied under the terms of its EU integration. For Estonia this implies moving from a liberal policy regime to a more restrictive EU regime (as presented in the table below). To receive direct payments, agriculture is subject to a binding production quota (at 80% of 1999-02 production levels). To simplify matters, suppose Estonian agriculture is a single product.

Estonian Agricultural Policy Regime as an EU Member (mil euro)	
	2004-06
Market measures	36.4
Direct payments	14.5
Rural development	31.8
Total agricultural policy expenditures	82.7

Source: *Agra Focus*, Agra-Europe, Oct 2002.

- Present a partial equilibrium model to show the welfare changes resulting from the new policy regime (i.e., from Estonia's perspective only). What are the effects on prices, production, consumption and trade? Assume Estonia is a small agricultural exporter. List your key assumptions and explain your model. (Hint: you do not know prices or quantities so you can only to discuss directional changes and not the magnitude of the changes!) Label your diagram clearly. (20 points)
- Given the scenario above (and your understanding of the EU regime) explain what kinds of agricultural programs might be included under market measures, direct payments and rural development. Explain how the market measures, direct payments and rural development programs relate to your model. Be specific. (10 points)

Show case from free trade to tariff protection, and blue box support w/ a prodn quota.



Market measures include tariff protection ($P_{EU} - P_W$) as the tariff provides a P-support; decoupled direct payments w/ a prodn quota cause supply to shift to S' (blue box); and rural development is green box which is assumed to not affect prodn or consumption directly. From Estonia's perspective, quantity supplied decreases, quantity demanded decreases, but quantity exported depends on the elasticity of demand relative to the tariff. That is, $[S' - D] \text{ at } P_{EU} \text{ can be } \geq [S - D] \text{ at } P_W$. Part of the cost of the quota is made up by the support price (given that the domestic price is P_{EU}). $\Delta PS = (a+b+c+\text{direct payments}-d)$.

2. (30 points) Poor macroeconomic policy can result in a process of economic degradation. This process tends to begin with trade and budget deficits, and then proceeds with debt accumulation, inflation, an overvalued currency, and foreign exchange shortages.

- a. Analyze and discuss the short and long-term implications of expansionary fiscal policy. *List* your key assumptions. (Hint: Keep in mind the type of country with these sort of macroeconomic problems.) (15 pts)
- b. How do your results and/or explanation in part (a) relate to the accumulation of debt, inflation, an overvalued currency and foreign exchange shortages? (15 pts)

Show relationship of -BOT and -(G-T). Continuous $\uparrow$ (G-T) $\rightarrow$ $\uparrow$ Debt accumulation.

$\uparrow$ (G-T) $\rightarrow$ $\uparrow$ P and i (Fisher effect). Interest rates increase because investors react to real interest rate not the nominal rate. Increases in i to finance debt means currency strengthens. The stronger currency makes X $\downarrow$ and M $\uparrow$ which implies a worsening of the BOT.

Use the Mundell-Fleming model to show this process.

Part I. (5 pts each; IØ300: 30 pts IØ301 25 pts) For the statements below, explain whether the statement is true, false or whether it depends. Defend your answer in a maximum of three sentences.

1. Fiscal policy under a flexible exchange regime is ineffective because the increase in government spending is offset by a reduction in private consumption and investment.

T. If FP results in "crowding out" such that the increase in interest rates results in a reduction in private consumption and investment, then the increase in G is effectively offset by decrease in C+I.

2. Suppose a country's central bank was interested in using the exchange rate as an instrument of trade policy. In the short term, depreciating the local currency would be more effective (for policy purposes) when import prices in local currency terms increase faster than prices of the exportable goods in local currency terms.

F/D. If the objective of using the exchange rate as a means to improve the BOT situation, and if the demand for imports is inelastic (because of S-R contract commitments or other factors), then the increase in the price of the importable (in local currency terms) will cause import payments to increase in the short run (J-curve). As a result, the BOT situation will worsen in the S-R.

3. Under the rules of the World Trade Organization, trade policies can be categorized as amber box measures, but not as blue box measures.

T. Trade policy involves import tariffs, quotas and subsidies, and export taxes, quotas and subsidies. All of these would be considered amber box measures. A blue box measure is a semi-decoupled income support payment or some other domestic income support payment designed to reduce production. Trade policy would have a price support equivalent not an "blue-box-type" income support equivalent.

4. The difference between the Sanitary and Phytosanitary Agreement and Technical Barriers to Trade Agreements is not in terms of the definition of the non-trade objectives, but rather on whether the regulations require harmonization or mutual recognition.

F. SPS and TBT objectives differ. SPS is concerned with human, plant and animal health and safety. TBT involves all other objectives or concerns, e.g., production processes, product definition, conformity assessment, and other technical aspects of the product, prodn or processing.

5. A quota will be superior to a tariff to stabilize domestic prices in cases where there is uncertainty in excess supply or excess demand.

F. The quota is superior to a tariff to stabilize domestic prices (ignoring the DWL implications) in the case of uncertainty in supply, but the quota is not superior to a tariff in stabilizing prices in the case of uncertainty in demand.

6. Suppose a country with a strict fixed exchange regime was currently running a current account surplus (i.e., a positive balance of trade). To maintain the fix, the government would be required to match the current account surplus with an equivalent amount of lending to foreigners and/or investment outflows. (IØ 300 only)

T/D. It is true that the gov't would be required to match the +BOT with an equivalent amount of lending to foreigners and/or investment outflows, but it could also reduce R.

Part II. (IØ300 3x20 pts; IØ301 3x15) Briefly answer each of the following questions or respond to the specific statements. Relate your answers to the concepts discussed in class.

1. (20 points) During the first quarter of 2002, the 12 member states of the European Union which agreed to adopt the euro will discontinue their national currencies.
 - a. List four theoretical expectations of a monetary union.
 - b. How do the concepts you listed above relate to the theoretical expectations of a monetary union? Explain only one of the items you listed. Be as specific and detailed as possible in describing the importance of the condition being met.

2. (20 points) The structure of the World Trade Organization (WTO) is founded on some basic principles which are applied to various agreements.

a. What does most favored nation (MFN) status and national treatment mean in the context of trade in goods? What does MFN and national treatment mean in the context of trade in services?

	Application on goods	Application on services
MFN	Same tariff rates apply to all member countries	Commitments for providing services across all 4 modes apply to all member countries in the same manner
Nat'l treatment	Domestic regs affecting goods and manufacturers are applied in the same manner for domestic and foreign goods/firms	Domestic regs on service providers and the manner in which a service is provided are applied in exactly the same manner.

b. What does transparency mean in the context of trade in goods, services? How does it apply in terms of the Sanitary and Phytosanitary Agreement and the Technical Barriers to Trade Agreement?

	Transparency
Goods	Use of tariffs not quotas. Tariffs are more straightforward in their application, their bound rates easier observed, and do not require the allocation of rights to import or export (as does a quota). Tariffs do not require an administration of licenses because the tariff is applied to all countries equally. A quota requires admin because, if binding, violates MFN.
Services	Bound commitments are spelt out. Members have the right to comment on new res that will affect services and service providing. This gives members the assurance that regulations and conditions are in place not to restrict trade but to achieve legitimate social non-trade objectives. Regs and conditions upon which services can be provided are kept at an inquiry point at which firms and member countries have access.
Import licensing	Conditions for acquiring a license and the justification for the license is spelt out by each member country where they apply. Changing licensing procedures are subject to comment by members. This gives member countries the assurance that licenses are permitted to achieve important social non-trade objectives rather than serve as a trade barrier.

3. (20 points) The 1970s brought the end of the Bretton Woods system of fixed exchange regimes that was set up after the second world war, ending an era of strict controls on international capital flows. Although international capital flows have become increasingly important, it is debatable whether an international capital market actually exists. Think about the theoretical conditions that would have to be met for an international capital market to exist when answering the following:

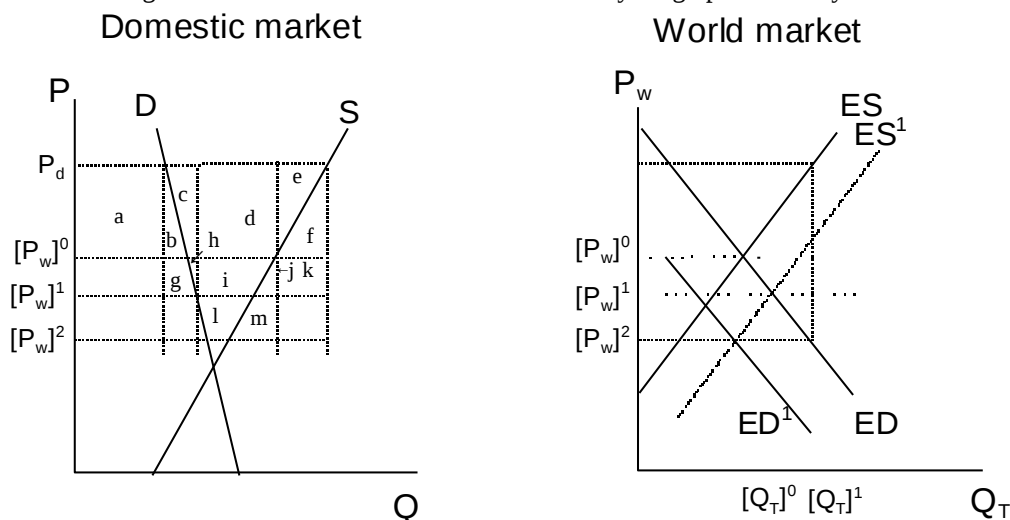
a. List four criteria (practical evidence) that would support or refute the existence of an international capital market. (Hint: What practical evidence of macroeconomic relationships would one study to determine whether an international capital market really exists? What would be the implication of a capital market?)

b. How do the concepts you listed above relate to the theoretical expectations of an international capital market? Explain only one of the items you listed. Be as specific and detailed as possible in describing the importance of the condition being met for an international capital market to exist. Is the condition being met or not? Explain.

Part III. (IØ300 2x30 pts; IØ301 1x30 pts) Answer the following questions. Be very specific and explain your answers to the best of your ability. Use graphs to support your answers where appropriate or where requested. Be neat and label your diagrams. Define concepts to help support your explanation.

1. Suppose there is a large exporting and importing country that engage in trade in some good. At present, the large net exporting country has the right to apply a specific export subsidy on a good that it exports (consistent with its WTO commitments). However, under some new hypothetical WTO rules the large net importing country will have the right to use a countervailing duty at some future time to offset the export subsidy. (10 points each)

- a. Show the trade and welfare effects in the exporting country of the export subsidy relative to free trade. Explain very clearly what the welfare effects mean and how they would relate to the exporter's WTO schedule of agricultural commitments. Be neat and label your graphs carefully.



Welfare implications (exporter)	Interpretation of economic meaning
$\Delta CS = - (a+b)$	CSE: - (a) which represents consumer transfer (tax)
$\Delta PS = + (a+b+c)$	PSE: + (a+b+c+d) includes domestic support/X subsidy
$\Delta G = - (b+c+d+e+f+g)$	G. value of the export subsidy, including int'l transfer [Q _S - Q _D] ¹ is the total volume of the export subsidy
$\Delta NSW = - (b+d) - (e+f+g)$	DWLs and int'l transfer

The CSE is a price support to producers paid by consumers while ΔG represents the export subsidy (as defined in part b). Hence there is domestic support in the form of price support and an export subsidy, both of which are considered amber box support.

- b. What is the WTO definition of an export subsidy? What is the definition of a countervailing duty? When can such a measure be applied, and how would the country determine the value of the duty?

A subsidy involves: (a) an income transfer to a firm or foregoing of payments by the firm, (b) for which the transfer involves a public body (inc a STE), and (c) such that the transfer confers a benefit to the firm. An export subsidy is an Y-transfer based on the X performance such that it confers a benefit. A CVD is a tariff on imports applied in response to some unfair trade practice (e.g., an export subsidy). An export subsidy is generally considered an unfair trade practice (in agriculture it is permitted only by having negotiated the right and a commitment to bound rates in volume and value terms). In the previous case, a specific export subsidy is shown. The CVD rate would be a specific tariff just equal to the per unit export subsidy.

- c. In a new graph, show the trade and welfare effects in the exporting country of the export subsidy and the application of a countervailing duty. Be sure to discuss the volume and value of the export subsidy, and the total value of the revenue from the countervailing duty. How would global welfare be affected relative to free trade?

The CVD has a tariff equivalent equal to $[P_w] - [P_w]^2$ which equals $[P_D] - [P_w]^1$.

2. Explain and show in a graph a specific case of how tariffs and quotas can be non-equivalent in the case of a monopoly importer. Specify your assumptions and discuss the intuition clearly in your explanation. (IØ300 only, 30 points) **See solutions to HW#6 or to Vousden text.**

IØ 300 EXAM May 2001

Part I. (30 points, 5 each) For the statements below, state whether the statement is true, false or whether it depends. Defend your answer in a maximum of three sentences.

1. Suppose a transition economy reformed its monetary policy to stabilize its monetary system by pegging the domestic currency to that of a developed country, but it still allows the domestic currency to depreciate when necessary. If the rate of inflation in the transition economy were higher than in the country to which its currency is pegged, then the real value of this country's import tariff revenues will decline.
2. The primary difference between a currency speculator and a currency hedger is in terms of their expectations on the future value of the exchange rate.
3. Suppose the central bank of a country decided to devalue the local currency. If the balance of payments follows a "J-curve" after the devaluation, then the balance of payments is expected to improve only in the long run.
4. If the interest parity condition holds, then a short-run change in the exchange rate would not be expected to overshoot its long-run equilibrium.
5. A fiscal expansion under a fixed exchange regime is powerful because the increase in government expenditures (or a tax cut) stimulates aggregate demand and output without affecting the asset market.
6. A customs union is a form of regional economic integration that does not imply market integration among the members of the customs union.

Part II. (60 points total, 20 points each) Briefly answer each of the following questions or respond to the specific statements. Relate your answers to the concepts discussed in class.

1. (20 points) A major criticism of the GATT was that agricultural trade was only loosely covered in the agreements and therefore international trade in agricultural commodities and food products were not subject to trade-rule disciplines. The WTO Agreement on Agriculture defines clearly the concept of market access and domestic support in order to have Member countries make commitments to liberalization.
 - a. Define and explain what is meant by market access. How does a Member country undertake its market access commitments?
 - b. Define and explain what is meant by domestic support. How does a Member country undertakes its domestic support commitments.
2. (20 points) An important item on the agenda for the current WTO negotiations is whether or not to strengthen the rules on foreign investment. The WTO TRIMs (Trade-Related Investment Measures) Agreement defines investment measures which are prohibited because they are trade-restricting, but the Agreement does not specify the conditions upon which foreign investment must occur.
 - a. List some examples of trade-related investment measures. How do these measures violate WTO principles?
 - b. List some of the issues involved with introducing disciplines on foreign investment. (Hint: Think about the benefits and costs of foreign investment.) In your opinion, would the inclusion of an agreement on investment under the WTO be desirable?
3. (20 points) The following questions relate to exchange rate regimes.
 - a. List the advantages and disadvantages of a flexible exchange regime. Do you think a currency band (whereby the currency is allowed float within some specified limits) could be considered the best of the fixed and flexible exchange regimes?
 - b. List some international trade and investment considerations that should affect the central bank's decision in choosing between a fixed or flexible regime. Briefly explain why.

Part III. (60 points total, 30 points each) Answer the following questions related to the scenario described in the paragraphs. Be very specific and explain your answers to the best of your ability. Use graphs to support your answers where appropriate or where requested. Be neat and label your diagrams. Define concepts to help support your explanation.

1. (30 points) Consider trade between two countries in a partial equilibrium setting. Suppose the exporting country experiences an appreciation in the value of the local currency (for some reason). Think about the trade implications of the currency appreciation and consider how trade policy could have produced similar results.
 - a. Show the partial equilibrium effects of an appreciation in the exporter's currency. Show the effects for both the exporter and importer. Could a market phenomenon have caused the appreciation? (10 points)
 - b. How could a trade policy measure by the exporter result in an equivalent outcome? How could a trade policy measure by the importer result in an equivalent outcome? Provide diagrams to defend your answers. (20 points)
2. (30 points) Suppose that a country is a net importer of a particular good that has well defined quality characteristics for which consumers are able to differentiate (e.g., high and low quality cheeses). You are asked to consider the implications of a policy to restrict the volume of imports relative to the value of imports:
 - a. Describe the market implications for a small importer restricting the overall quantity of cheese entering its market. Assume that initially high and low quality cheeses were traded freely (without a quota or a tariff). How does the volume quota affect the volume of trade for the high and low quality cheeses? Explain and make any necessary assumptions known. (15 points)
 - b. Describe the market implications for a small importer restricting the overall value of imports of cheese. Assume that initially high and low quality cheeses were traded freely (without a quota or a tariff). How does the value quota affect the volume of trade for the high and low quality cheeses? Explain and make any necessary assumptions known. (15 points)

End of May 2001 Exam

Part I.

1. A local content requirement to use some percentage of local agricultural commodities on a foreign agribusiness firm (say, a food processor) would be in violation of GATT principles or rules because such a measure would be more distortive than a tariff.

F. It would be in violation of GATT principle of national treatment, but the measure would not be more distortive than a tariff. If the local content requires 60% local content and has duty-free access on the remaining inputs or components, then it would actually be less distortive than a tariff.

2. WTO Member countries would prefer that an importing country use a temporary import value quota for a category of imports (e.g., cheeses) rather than temporary uniform specific tariffs on the cheeses.

T. An import value quota is similar to an ad valorem tariff. So, for a category of imports, say cheese, there will not be a change in the price ratio. The temporary uniform specific tariff will result in changes in the relative prices of cheeses which WTO Members would not like.

3. Suppose a country has a fixed exchange rate regime. An increase in the demand for money (for some reason) could require that the central bank of the country purchase foreign assets to keep the currency at the targeted fixed rate.

F/D. Under a fixed exchange rate regime, an increase in money demand would require the central bank to reduce domestic interest rates through an increase the money supply. An increase in MS through purchases of domestic bonds would put more money into the market reducing interest rates. If the central bank of the purchased foreign assets, this could also put more money on the market and might change the expectations on earned assets [i]^e. The more direct method is through increasing MS.

4. If the capital market were truly global, then countries with high investment needs are expected to have very large current-account deficits, that is, a negative trade balance.

T/D. If K-mkts are global then countries in need of K for investment are likely to have high K-inflows resulting from higher interest rates (K-deficit area). Net K-inflows are typically associated with a negative trade balance.

5. If the central bank's objective is to set a target for the rate of inflation, then a fixed exchange rate tends to be the more appropriate exchange rate regime.

F. If the central bank's objective is to target the rate of inflation, then the exchange rate regime is likely to be a flexible regime. See money market and asset market eqblm.

6. Typically WTO Member countries complain about the measures in place to restrict imports. What are two reasons why WTO rules also apply to export restrictions?

(a) large country exporter can improve SW through TOT

(b) if export restriction is on a primary product or commodity then the restriction can lower the input price of the processed final product (subsidy to processing sector)

Part II.

1. (20 points) Which mode of trade in services would most likely be protected (restricted) in a developed/developing country? Define the mode of service, give an example, and defend your answer.

a. Developed country

b. Developing country

Depends on specific answer. Modes: #1 cross border, #2 consumption abroad, #3 commercial presence, and #4 movement of natural persons

(a) most restrictive in DCs is mode 4 especially w.r.t. low skilled labor, but mode #3 is restrictive in some subsectors of such as banking; (b) most restrictive is #3 with regard to FDI across the board, depends on country

2. (20 points) Recently the Danes rejected joining the European monetary union, renewing the debate over the benefits and costs of monetary union. To determine the likely costs and benefits of membership to the EMU it is necessary to consider the theoretical expectations.

a. What are the theoretical conditions for an optimal currency area? What are the macroeconomic criteria one would use to assess whether joining the monetary union is in the national interest?

Optimal currency area: cost of giving up flexible E and ability to change E; use of E as tool for macroeconomic stability or econ growth;

Criteria for EU: Immobility of L; W, P inflexibility; fiscal stabilizers; exchange rate as a tool for employment; occurrence of shocks and asymmetry

b. In the context of the European Monetary Union, what is the economic argument for and against the Euro?

Argument for: supports economic union and mkt integration; static (no exchange rate variability for trade, no transactions cost, no info costs, less foreign reserves required, seigniorage gains) and dynamic gains (no exchange rate variability for investment)

Argument against: asymmetric shocks, loss of MP as a stabilizing tool

3. (20 points) Tariffs and quotas are not equivalent under market uncertainty. Develop a scenario whereby some international market uncertainty exists and government intervention is desirable. Structure your answers as follows:
 - a. Explain the potential market failure problem associated from such uncertainty and specify the government's policy objective. How is welfare affected under free trade and with government intervention?
 - b. Which trade instrument would work best to achieve the objectives you specified, the tariff or the quota? Be sure to specify the objectives and list your assumptions.

Part III. (60 points total, 30 points each) Answer the following questions related to the scenario described in the paragraphs. Be very specific and explain your answers to the best of your ability. Use graphs to support your answers where appropriate or where requested. Be neat and label your diagrams. Define concepts to help support your explanation.

1. Suppose Norway's resistance to EU membership is because of the perceived insufficiently democratic political institutions and processes in the Union; however, from an economic perspective there is a majority who are in favor of greater economic integration. In other words, for Norwegians some degree of economic integration with the EU is acceptable, but political integration is not.

a. Define the relevant concepts and use them to answer the questions. (10 points)

- (i) What is a free trade area and how does it differ from a customs union?
- (ii) From the voters' perspective which form of economic integration might be preferred? Explain in the context of your answer to the first question, (i).

b. Provide a graph and answer the related questions. (20 points)

- (i) Show the case where a customs union results in trade diversion, given that Norway also trades with non-EU member countries. Use a simple partial equilibrium model to show this possibility. (It is not so important for your answer to be factually correct. It is designed for you to tell a story and use a simple model to help support the story.)
- (ii) What are some dynamic welfare implications of a customs union for Norway? Explain.

2. Suppose a WTO Member country was a large net importer of a specific agricultural commodity in the absence of amber (yellow) box or blue box policy measures. However, in reality the government does intervene through production measures and trade measures such that the country is actually a net exporter of this commodity.

a. Answer the questions related to the scenario presented above. (10 points)

- (i) What are the likely production measures and trade measures being used? List the possible measures and be very specific. Would the measures you listed be considered amber or blue box? Explain.
- (ii) Could green box measures alone have achieved the trade reversal scenario above? Explain.

b. Provide a graph and answer the related questions. (20 points)

- (i) Use a simple partial equilibrium model to show what is occurring in the situation described by the scenario above. Make your assumptions clear, be neat, label your diagram carefully, and explain the welfare implications.
- (ii) How would WTO Member countries likely approach this country in the upcoming round of trade negotiations? What specifically do you think trading partners would request? Which would be the most binding constraint on the policy objectives of this country? Why?

End of Dec 2000 Exam

Exam IØ 300 (no solutions included) May 2000

Part I. State whether the following statements are true, false, or whether it depends. Defend your answer in a maximum of three sentences, regardless of what you stated. If depends is your answer, be sure to explain upon what it depends. (30 points total, 5 points each)

1. Suppose a developing country with a fixed exchange rate regime repeatedly had international currency speculators challenging the exchange rate. If the country chose instead a currency board, then the central bank would no longer have to worry about currency speculation, but it would have to accept some exchange rate fluctuations within a well-defined currency band.
2. Suppose there is news of successive record trade deficits in the United States. If the trade deficits are financed in large part by foreign capital, then this should result in a weaker dollar.
3. Exchange rate distortions by a central bank are argued to have trade policy objectives. A depreciation of the kroner orchestrated by the Norwegian central bank would simply act as a tariff on imports.
4. The more value-added activity in an economy, the more likely is that a devaluation will be beneficial to an economy.
5. In the eyes of the World Trade Organization (WTO) an agribusiness firm engaged in the dumping of an agricultural commodity or food product is no different than an export subsidy.
6. Issues involving the quality of fresh foods would be considered a matter under the WTO Technical Barriers to Trade Agreement rather than the Sanitary and Phytosanitary Agreement.

Part II. Briefly answer each of the following questions or respond to the specific statements. Be sure to relate your answers to the concepts discussed in class. Avoid unnecessary and irrelevant information as this adversely affects the quality of an answer! (70 points)

1. (20 points) Tariffs have often been used by policy makers to achieve a variety of objectives because they are generally easier to pass through parliament than some other policy measure. However, the tariff is not always the most appropriate measure to achieve those objectives.
 - (a) List or summarize the economic implications of a tariff. For which objective(s) is a tariff the most appropriate policy measure? Briefly explain. (10 pts)
 - (b) Consider the differences between an ad valorem tariff and a specific tariff. What are the objectives of an ad valorem tariff relative to a specific tariff? Under what conditions would the WTO favor one type of tariff relative to the other? Explain. (10 pts)
2. (20 points) Economists argue that at a given point in time there is a tariff equivalent for every quota that exists. As a result, the WTO required that quotas be "tariffied", converted into tariffs.
 - (a) How would an economist compute the tariff equivalent of a quota? Explain. (10 points)
 - (b) Give an example of when quotas and tariffs are not equivalent, i.e., a case when tariff and quotas do not have identical welfare implications. Use one example and explain why the welfare implications differ under a quota relative to a tariff. (10 points)
3. (30 points) Suppose that the central bank of some developing country had been charged with two responsibilities: (1) to maintain a stable exchange rate *and* (2) to pursue low rates of inflation. However, the central bank of this country has been unable to maintain a fixed exchange rate and the country has had a long history of high rates of inflation.
 - (a) Now suppose instead the central bank only considers targeting some rate of exchange. Which type of exchange regime would the central banker most likely use? Explain. (10 pts)
 - (b) Suppose the objective is to target some level of inflation. Which type of exchange regime would the central banker most likely use? Explain. (10 ps)

(c) What does it mean for a central bank to be independent? Why is an independent central bank useful to fulfill its responsibilities? Explain. (5 pts)

(d) What is a currency board? List some reasons why a currency board (for a country with a situation as described in the above paragraph) might be advantageous. (5 pts)

Part III. Answer the following questions related to the scenario described in the paragraph. Be very specific and explain your answer to the best of your ability. Use graphs to support your answers where appropriate. Define concepts to support your explanation. (50 points)

1. (25 points) Suppose a world with two countries (North, South) and two goods (agricultural and manufactured) where South is a net exporter of agricultural goods and net importer of the manufactured good. Now South is considering the use of a voluntary export restraint (VER) for some short-term protection for its agricultural sector.

(a) First define what is a VER in practice and explain which type of countries would enter into such an arrangement. (5 points)

(b) Does the WTO have a position on the use of VERs? Why would the WTO approve or disapprove of a VER? (5 points)

(c) Use a partial equilibrium model to show the trade implications of the VER. (You only need to show the world market for agriculture and not the internal agricultural markets for North and South). Then, using offer curves, illustrate the potential general equilibrium effect of the VER on the terms of trade and quantity traded. (15 points)

2. (25 points) Governments often intervene in their domestic agricultural markets because international markets are volatile, causing instability in agricultural prices, income and quantities.

(a) What are the economic reasons that might justify government policies to stabilize agricultural markets? Discuss the effectiveness of direct payments as a means of stabilizing markets. (15 pts)

(b) When can a futures market be more effective than direct payments as a tool for reducing price uncertainty? (5 pts)

(c) When is a futures market not effective for an agricultural commodity? (5 pts)

_____End of Exam May 2000_____