

Date: 14 December 2015

Time: 09.00 – 12.30

Phone: 5663

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INSTRUCTIONS

Examination aids: Code A2.

You have no need of any type of calculator. You are allowed to use a two-way Norwegian (or any other foreign language) – English dictionary and/or an English – English dictionary (excluding a dictionary of economic concepts).

Instructions: Look over the exam to ensure that there are three pages (including this page).

Please keep answers from Part 1 separate from answers from Parts 2 and 3, and answers from Part 2 separate from those of Part 3.

Avoid unnecessary information as this will negatively affect the quality and value of your answer. When asked to provide a graph, be sure to label the diagram carefully, be neat, make assumptions explicit and give an explanation. Graphs are required only when specifically asked for, but you can use graphs whenever you think it helps your answer.

FORMAT

Examination format: The exam consists of three parts for a total of 100 points.

Part 1: (25 points) short answer format, 5 statements to address, each worth 5 points

Provide a brief explanation (no more than three sentences are required) to explain why the statement is either true, false, or whether it depends. Defend your answer in all cases and provide an example if it helps. You may use a graph to defend your answer.

Part 2: (45 points) medium-length answer format, 3 questions, each worth 15 points.

Provide short answers to the questions or statements and define relevant concepts. You may use a graph in your answer, but be sure to explain your graphs if you choose to illustrate your points in that way. Each problem is divided into two sub-parts. If asked for a *list*, a few bullet points related to the concept(s) is what is required.

Part 3: (30 points) trade modelling scenario and detailed supporting answer

The question involves modelling a specific policy situation and trade policy analysis. You are instructed to provide a graph(s). Be sure to provide an explanation and any supporting assumptions that clarify what you are demonstrating in the graphs.

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 WTO trade disputes are more likely to involve violations of the basic principles from the use of domestic regulations rather than from trade policy or domestic support measures.

T. WTO trade disputes do involve violations of the basic principles. However, it is far less likely that a country violates its bound commitments on MA, DS or ES than on dom regs affecting trade because bound rates are transparent and difficult to violate without a challenge from trading partners. The implementation of a dom regs is what is needed to assess to determine whether it violates the basic principles because the reg is argued to be justified on the grounds of some non-trade objective. Dom regs govern a larger share of commercial activity and so are more likely to be involved in trade disputes (e.g., SPS and TBT-related regs are commonly involved in disputes). By its nature a dom reg is less transparent and predictable and there is no binding commitment because countries have the right to regulate, but in a manner that is consistent with those basic principles (e.g., non-discrimination, predictability and transparency).

1.2 An export tax on a commodity by an exporting country could be an appropriate policy response against tariff escalation (i.e., the practice of charging higher import tariffs on processed goods than unprocessed ones) by an importing country.

T/D. Tariff escalation in Home, a net importing country, is a means of restricting market access of more value added products relative to unprocessed goods or commodities. This serves to protect/support the value added sector in that country, which in turns might slow development of the value added sector in Foreign, a net exporting country. Tariff escalation is argued to be a means of keeping commodity exporters dependent on low-value added goods. Hence, an export tax could be an effort by the exporting country to reverse this tendency by restricting exports of a commodity. The price of the commodity in the home market falls and could encourage more value added of that commodity for the local market. The tariff escalation could mean that in Foreign, the country is still not in a position to export goods with more value added because the tariff protection blocks MA of the commodity. Nevertheless, the lower price of the commodity in Foreign could undermine the commodity producers and lower their output/investment in future production capacity. This could hurt the L-T value-added sector.

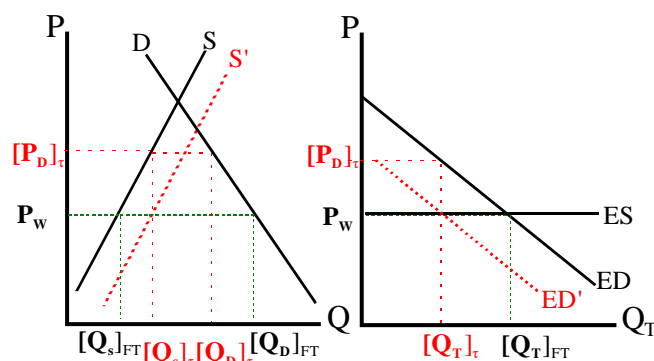
1.3 Protection of intellectual property rights under the WTO TRIPS agreement imply that there are potential rents paid by consumers, but that the redistribution of income occurs mostly within an economy.

F. IP protection gives a firm monopoly rights over a product (e.g., drug) for some duration in all markets. TRIPS ensures that the protection is granted multilaterally. In the case of a patent, the monopoly right is for 20 years for which there might be no good substitute (monopoly pricing); for a trademark the protection is permanent but there might be substitute goods (monopolistically competitive pricing). Hence, rents associated with IP protection stem from imperfectly competitive behavior by the firm, which are paid by consumers, but the redistribution of income occurs within and across economies.

1.4 A production subsidy could be referred to as an implicit import tariff (i.e., having a similar effect) because it functions as a market access restriction.

T. A tariff shifts the ED to ED', reducing the country's willingness to trade. A prodn subsidy (e.g., one that reduces the cost of an input) shifts domestic supply to S', and reduces import demand ($ED' = D - S'$). ED' can be equivalent under either policy. Basically, a subsidy (prodn, income or price support) can give domestic producers

equivalent level of support as a tariff depending on the objective. The trade-related effects differ on account of how the market is distorted, but MA is affected in each case.



1.5 A regulatory measure whose objective is to establish the quality requirements for fresh food products qualifies as a SPS (sanitary and phytosanitary) measure rather than a TBT (technical barrier to trade) measure because of the scientific evidence required to prove the product is safe.

F. A regulatory objective to establish a technical definition for what constitutes a quality standard for fresh food is a TBT issue. If it were an issue of whether fresh food is safe, then it would be SPS. There are two separate issues/objectives here. Fresh food is TBT because it involves info regarding prodn, packaging, processing, labeling. Food safety and the scientific evidence to prove food is safe is SPS. Food safety applies to all food (e.g., fresh or frozen or canned). Thus, this is more about the definition of what constitutes fresh not safe.

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 Although the WTO's *raison d'être* (i.e., main objective) is to liberalize trade, its rules and principles do give governments the right to impose measures that restrict trade in cases of emergency, i.e., situations where domestic producers are 'seriously injured' by imports. Consider the economic nature of the injury and the different policy responses a country can take (e.g., safeguard, countervailing or anti-dumping measures) when answering the following:

2.1.1 List criteria that one could use to measure serious injury, and explain the difference between safeguards, countervailing measures and anti-dumping. (8 points)

Criteria to measure serious injury:

- * Increased imports
- * Lower dom price
- * Decreased sales or mkt share
- * Decreased production
- * Decreased profits
- * Unemployment in the sector
- * Capacity utilization decreases

Safeguard measure is when import volumes increase and domestic price decrease which is the cause of the serious injury. This could be the result of some change in market situation where the country chooses to raise $\tau > \tau_{MFN}$, requiring negotiation and compensation.

A countervailing measure is a trade restriction (usually a tariff) in response to the injury caused by an *illegal* subsidy provided to the foreign product/producer.

An anti-dumping measure is a trade restriction (a duty) in response to the injury caused by unfair ("predatory") behavior by a foreign firm (e.g., selling at below cost of prodn or selling on world mkt less than P_D).

2.1.2 Why do WTO rules on the use of these emergency measures apply under trade in goods but not trade in services? [Hint: think about the nature of services and how WTO commitments are taken under services.] (7 pts)

Services differ from goods in that they are non-physical, non-storable, heterogeneous, and non-tradable / less separable from consumer and provider. WTO commitments taken under GATS are obligations to not apply dom regs that are more restrictive than what countries notify in their Schedules. Commitments are horizontal and sector-specific and across 4 modes: (1) cross border, (2) consumption abroad, (3) commercial presence, and (4) natural persons. Countries essentially reported and notified how it was that dom regs violate MA and NT and could be as restrictive as they wanted (because dom regs are not viewed as trade policy even if they do limit foreigners' MA and distort trade). The commitments taken are already similar to "safeguards". Given the characteristics of services it is harder to link emergencies to foreign competition in TIS. Subsidies are not defined in the context of services, making a CVM not possible. Services tend to be bundled and linking the subsidy to a particular service can be more difficult. If services are bundled and there are economies of scope in prodn, then it is harder to disentangle cost of prodn to establish dumping. Different quality of services (heterogeneity) can affect price (P_D and P_W), particularly if comparing prices of a service across countries.

2.2 At the Hong Kong WTO Ministerial meeting in 2005, member states committed to continue pursuing the following objectives, among many others, under the Doha Round: (1) elimination of agricultural export subsidies, (2) reduction of agricultural tariffs, and (3) duty-free, quota-free access for 97% of the goods originating in the world's least developed countries. Keep in mind the effect that these commitments could potentially have when considering the following:

2.2.1 Consider only those member states that would have to take commitments on all three of the items listed above. What would be the effects on domestic prices and welfare of the countries taking policy actions to meet all three commitments? Which of the three commitments would likely result in the biggest effect in those countries? Explain. (10 pts)

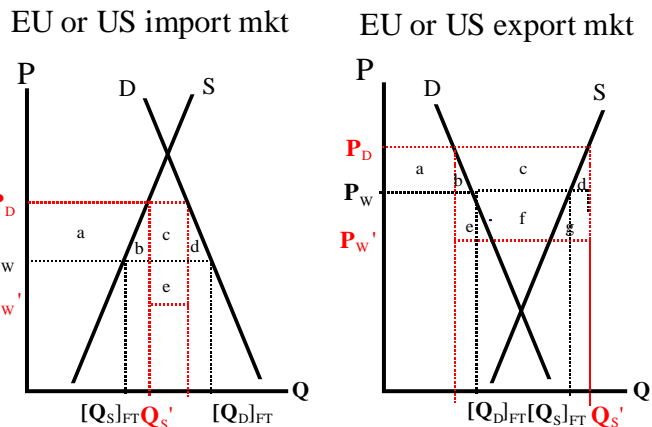
It would have been useful to identify the countries having to take such commitments: the US and Europe. In all three cases, the commitments would $\downarrow P_D$ and \uparrow overall NSW ($\downarrow PS$ but $\uparrow CS$) in the US and EU.

(1) Few countries negotiated the right to use ES and fewer still can afford it. Oddly, the biggest users of ES were net importers countries of selected goods (in the absence of trade policy), e.g., the EU and Norway. Nevertheless, the trend has been a steady \downarrow in use of ES. Given the unilateral move to \downarrow ES, the complete elimination, while important, is not the most imp't reform.

(2) US tariffs are generally low except for some limited number of goods that are sensitive, while for the EU tariff protection is higher across a broader range of goods. Increased MA would $\downarrow P_D$ and \uparrow overall NSW ($\downarrow PS$ but $\uparrow CS$) over a much broader range of goods. For the EU, which has moved toward more decoupled support, the high MA restrictions still reduces some of the support that the gov't needs to transfer to producers because consumers pay the support in higher prices. The increased MA could mean that gov't might have to redistribute more income to producers to make up the lost income transfer from consumers. Increased MA would be most imp't reform – opens mkts to broader range of countries and broadest range of goods.

(3) Duty-free, quota-free MA granted to exports from the least developing would probably have very small effects on price and welfare. This is because the least developed are few in number, least likely to increase exports substantially in the short run, or are likely to be constrained by SPS and TBT regs in the very goods in which they have a CA. Exporting will require investment in institutional and technical capacities.

Graphs show large country cases of US/EU import tariff and export subsidy. Assumption is that (e) is not $>$ (b+d) in the import case, e.g. that SW is reduced under either policy intervention. World prices are depressed in both cases. Removal of either policy results in: $\downarrow P_D$, $\uparrow P_W$, $\uparrow Q_T$, and \uparrow overall NSW ($\downarrow PS$ but $\uparrow CS$).



2.2.2 What would be the effects on world prices and welfare for the partner countries? Which would have the largest effect on trade and global welfare? Explain. (5 points)

The increased MA into the US, EU and Norway would $\uparrow P_W$ and \uparrow NSW in net exporting ag countries. In poor net importing ag countries the higher prices would negatively affect welfare. Based on the argument in 2.2.1, the increase in MA would have the largest effect on trade and global welfare. Big country mkts would open to middle-income countries that have a CA across a wide range of goods. ES have trended down (esp with higher world commodity prices and unilateral reductions beyond UR commitments) and they apply on a limited range of goods.

2.3 In autumn 2016 it is probable that the United Kingdom (UK) will hold a referendum on whether or not to remain a member of the European Union (EU). Consider a scenario in which the UK votes to leave the EU. Suppose the future UK-EU relationship can take on one of the five following forms: (1) becoming a member of the European Economic Area (like Norway) whereby the UK would have access to the EU market for goods and services, with exclusions on agriculture and fishing policy, in exchange for following EU rules without any say in drafting them and contributing to the EU budget; (2) becoming a European Free Trade Association member (like Switzerland) which is not part of any large regional group, but signs bilateral agreements with various countries and negotiates smaller bilateral agreements rather than a comprehensive deal with the EU; (3) creating a customs union with the EU as Turkey has done; (4) striking a special UK-EU bilateral deal without the disadvantages of the other models; or (5) to rely on normal WTO rules for access to EU markets. Think about what trade liberalization and economic integration imply when answering the following.

2.3.1 Outline a framework (i.e., *list some economic criteria*) by which to assess/evaluate the alternative UK-EU economic relationships. [Note: you do not need to know anything about the UK's economy to answer this.] (10 points)

General problem: economic integration involves trade in goods, services and int'l L, K mobility and UK hypothetically opts out of the arrangement.

Macro considerations:

$$Y = C + I + G + (X - M)$$

How are C patterns in the UK related to the EU?

How are I patterns in the UK related to the EU? K-inflow and K-outflow?

How are trade patterns in the UK related to the EU?

Note: UK is not part of Schengen or the euro area so there is no consideration for political integration of that magnitude.

Framework to assess existing relationship in trade in goods, services and capital

1. Trade in goods

1.1 Import market access

EU membership implies UK has duty-free trade with EU and a common external tariff. UK's bound tariffs are same as EU. Tariffs low on manu goods and higher on ag. [UK is more mkt oriented in general than overall EU] Leaving EU would probably not pose much of a problem with MA restrictions on imports.

1.1.1 Trade policy: loss of duty-free, quota-free MA with EU

A big part of econ activity could be affected if it is linked to trade with EU. Would need to consider UK-EU trade in goods. What share of UK trade is with EU? How much trade diversion as a result of duty-free access?

1.1.2 Dom regs:

UK has SPS, TBT regs that are harmonized with EU. Would there be a need to change regs? If TIGs is impnt with EU, then there is no need to change regs that already comply with EU. Future regs need not be harmonized with EU, which could restrict trade.

1.2 Subsidies and domestic support

1.2.1 Subsidies in manu

EU-wide subsidies would no longer include UK and the UK would lose out on EU initiatives. It is not clear how much a problem this would be one way or the other.

1.2.2 DS in ag

UK is not the biggest recipient of EU CAP support. EU ag policy has already moved toward decoupled support. Could either be positive or negative, but the ag sector is relatively small share of overall economic activity.

2. Trade in services

Services sector is the largest share of economic activity. EU services integration is the weakest part of economic integration. Dom regs still account for most of the policy affecting commercial transactions in services. WTO commitments by EU member states are still country-specific and not EU-wide. [UK has a positive balance of trade in services and has impnt services sub-sectors.]

2.1 Sectoral issues

The UK's economy is increasing related to services and TIS is impnt for the UK

2.2 Domestic regs applicable to services

The UK as all EU countries have their own commitments under GATS, i.e., dom regs on services are not harmonized. This need not create big problems for the UK. Financial services are an impnt sector for UK and it is an impnt trade sector. Leaving the EU could hurt the UK's competitiveness in financial services.

3. K mkts, K movement and foreign investment

3.1 UK-EU K flows can be affected from free K mobility within EU

3.2 Harmonization of regs on common sectors can be affected

3.3 Non-participation of non-EU K in EU projects

3.4 Loss of K-inflow from non-EU members using UK as a platform for EU sales

2.3.2 Rank the alternative relationships from most to least desirable. Explain how you came to rank the most desirable alternative. Be specific. (5 points)

Answer depends on the framework devised and what is stressed as important in trade relations, e.g., how important are common domestic regs, trade policy, and investment measures. I assume that UK opted out because an “ever closer (economic) union” was rejected.

UK is considering breaking away from EU mostly because it does not like the regs passed by EU. Would be odd to think that either (1) or (2) would be acceptable. A CU with the EU would be easy because it already has a CET and common trade policy. TIG would be unaffected, except insofar as domestic regs matter. The more a CU included domestic regs the more problematic the negotiations would become. A CU is normally a step toward future integration. A special bilateral agreement sounds more like a FTA+ type of arrangement. This now depends on how important is UK-EU TIG. TIS seems to be a bigger concern. If EU integration in services improves, this could help the UK, especially if the UK had a say in that process. If so, then FTA+ must include some sector-specific negotiations on services with special attention to modes 1 and 3. Given such an important move it might be best to pursue (4 or 5). (4) could include key services sub-sectors and (5) would minimize formal relations and set the UK on a different course. What was key, was the framework by which to think about the implications of breaking away.

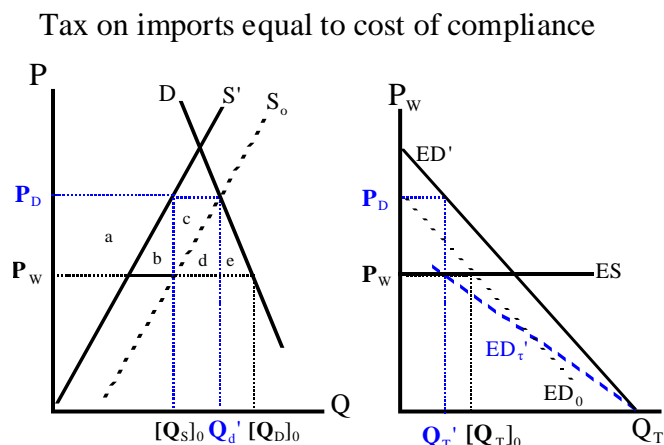
Part 3. Answer the questions related to the regulatory situation described below. Be specific and explain your answers to the best of your ability. Label your graph(s) clearly and explain them. Define concepts you think will support your answer. (30 points)

The rules and principles of the WTO are a balance between of the right of a government to regulate its domestic economy and a constraint upon that government from using domestic regulations and/or trade policy for protectionist purposes. Suppose a *small* net importing country called Home is proposing policy/domestic regulation to meet an environmental standard associated with the production of some good. Evaluate the policies being considered in Home in terms of their economic, trade and welfare effects, and their WTO consistency.

3.1 Provide graphical analysis and discuss the economic, trade and welfare effects of three policy regimes proposed by Home’s government. The proposed policies are:

- (1) An *ad valorem* tax on imports of a foreign good (equal to the cost of compliance with the standard in Home) when produced using a method that violates Home’s environmental protection laws (which do meet an international standard);

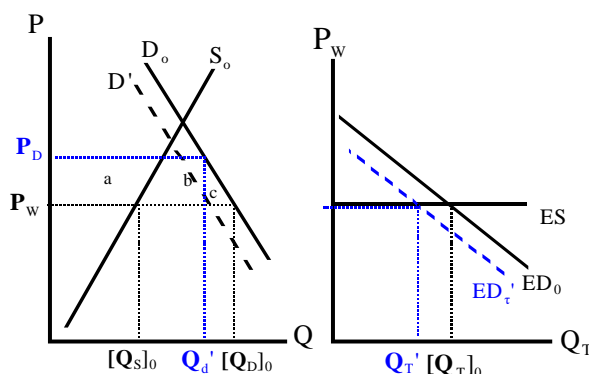
S_0 is the original domestic supply without environmental reg. Before the reg was enforced, ED_0 mapped willingness to import. The decrease in domestic supply to S' with the reg (i.e., a compliance cost of $P_D - P_W$) means ED' has a higher willingness to import. However, at tax on the new ED' means imports enter at ED'_T . The import tax equal to the cost of compliance with the reg reduces imports and quantity demanded. Producers are unaffected (cost of compliance is covered by tax on imports (allowing P_D to cover costs)).



- (2) A tax on domestic consumption on the good, both locally and foreign produced, as a means of reducing pollution (rather than requiring a production standard); and

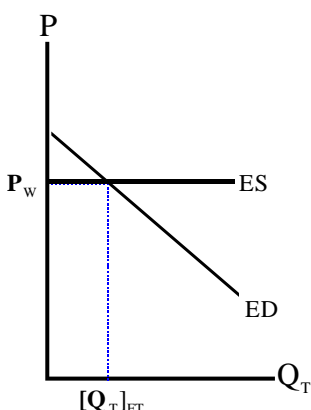
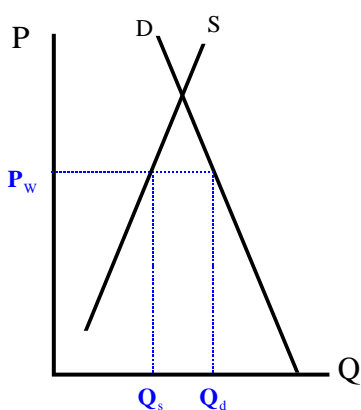
Consumption tax

A consumption tax on both imports and the local good shifts D to D' and reduces domestic consumption to Q_d' . Imports enter at P_w and a dom tax collected equal to $(a+b+c)$. Imports are reduced to $Q_d' - Q_s$.

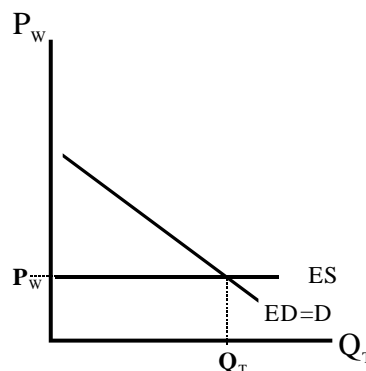


- (3) All domestic production in Home must meet a national standard, and there is free trade but under a mandatory labeling requirement stating whether or not the imported good meets the production standard. (15 points)

Mkt of good meeting high std



Mkt of good with low std



The good meeting a national standard and the other that does not meet the standard are considered two separate markets. The label is intended to provide info and assurance of the different characteristic of the good (from production). The good meeting the std is assumed to have a higher cost (to comply) and the good that does not meet the std has a lower price (reflecting lower costs). All domestic prodn must meet std implies that the domestic demand for the low std good is the same as import demand ($ED = D$). How much of the two is consumed depends on relative prices.

- 3.2 Rank the three regulatory alternatives for their appropriateness to achieve some environmental objective. Justify the ranking. For the regulation ranked as most appropriate, think about how it rates in terms some specific criteria. That is, explain whether it can be put into practice in a manner that is not: (1) arbitrary or inconsistent; (2) discriminatory in favor of specific producers or suppliers, (3) inefficient or trade-distorting; (4) transparent; (5) likely to raise legal issues (i.e., it complicates the dispute settlement process); and (6) likely to result in excessive costs, e.g., market-related costs or administrative fees or charges. (15 points)

Ranking of policies in terms of addressing the externality: [3], [1], [2]

[1] A labeling regime is possible to be put into practice that is not arbitrary and WTO-consistent. One issue is whether the national std is consistent with the int'al std. If it exceeds an int'al std, then there could be questions about the justification of the measure.

[2] The labeling regime is a mkt-oriented solution allowing consumers' willingness to pay determine how much of the one type or the other type of good to consume. Because this is a prodn externality, it really requires a tax or sub on prodn to deal with the reduction in the pollution (or the bad). So allowing consumers to decide via their purchases through their WTP might not be an effective strategy. The P of the good meeting the high std might be higher than the WTP for that good (and the reduced pollution associated with its prodn).

[3] It is less trade distorting than the other two policies being considered and more directly addresses the problem than the others. It is argued to be more efficient in terms of allowing consumers to choose, but it might not be much more effective in terms of addressing the problem on the prodn side. Int'al stds would be more effective.

[4] Labeling can be transparent.

[5] The labeling regime requires an institutional process to ensure that producers meet the std and that the goods are tracked thru the mkting channel to comply with the label. Whether it raises legal issues relates to the trade distorting aspect and to the cost of compliance with the labeling and who bears those costs.

[6] The implementation of the program has implications for who bears the cost of the labeling. If both goods are labeled and both sets of producers assume a cost, then the costs should not distort trade or cause disputes on the unfairness of the application of the system.
