EU Enlargement and
Technology Transfer to New Member States

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Abstract

The European Union (EU) accomplished its biggest enlargement process in 2004 in terms of the number of countries, area, and population. This study focuses on the impact of enlargement, the resulting technology transfer on the grain sectors of the New Member States (NMS), and the consequent welfare implications. The study finds that EU enlargement has important implications for the EU and the NMS, but its impact on the world grain markets is minimal. The results show that producers in the NMS gain from accession because of higher prices, whereas consumers in most NMS face a welfare loss. Incorporating technology transfer into the accession increases the welfare gain of producers despite falling prices because of the larger supply shift. The loss of welfare for consumers in most NMS is lower in this case because of the decline in grain prices.

EU Enlargement and Technology Transfer to New Member States

Introduction

At the end of 2003, the European Union (EU) concluded its negotiations with 10 candidate countries,[1] and in 2004 it accomplished its largest enlargement process in terms of the number of countries, area, and population. This development is significant for world grain markets, as the EU has been a large importer and exporter. Moreover, the enlargement will have some substantial impacts within the EU because the agricultural sector is critically important in the New Member States (NMS).

The agricultural sector of the NMS generates a higher percentage of the GDP and employs a larger portion of the labor force relative to the EU-15. However, the structural inefficiency of the farms, a residual consequence of collectivization after World War II, has lead to low agricultural output levels in these countries, which were once considered the "bread basket" of Europe. Financial and capital constraints contributed to lower yields, as they limited the purchase of inputs by farmers. Although the yield levels have started converging toward the EU-15 levels in recent years, there is still much potential to be realized in the NMS.

Many instruments of the common agricultural policy (CAP) of the EU, such as direct payments to farmers, are expected to benefit the agricultural producers of the NMS and increase their production and export levels. With their accession to the EU, not only will agricultural and trade policies of the NMS be harmonized with the EU but the NMS also will benefit from technology transfer from the EU-15 members through foreign direct investment (FDI).

Bevan and Estrin (2004) analyze the determinants of FDI from Western countries, particularly in the EU, to Central and Eastern European Countries (CEEC). They show that

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announcements about EU accession proposals increase the levels of FDI to the prospective members. Sinani and Meyer (2004) focus on the role of FDI in generating technology spillovers to host economies in the case of Estonia. Their study demonstrates the positive effect of technology transfer on the productivity of domestic manufacturing firms in Estonia.

Technology transfer will also affect the supply response in the agricultural sectors of the NMS after the enlargement, as well as the CAP. Thus, the impact of technology transfer and the supply response it generates in the NMS need to be considered when evaluating the impact of EU enlargement on the NMS, EU, and world grain markets.

In this respect, this study analyzes the impact of the EU enlargement on the NMS, EU-15, and world grain markets as well as the impact of technology transfer on the grain sectors of the NMS after the accession. The main objective is to compute the changes in welfare in the NMS because of the accession and the resulting technology transfer. Enlargement creates three different shocks to the grain sectors of the NMS: change in tariff rates in the NMS, phasing in of CAP instruments, and technology transfer. As the potential technology transfer in the grain sector of the NMS is well documented, as will be discussed in a later section, this study focuses on the grain sector.

In this context, I first set up a benchmark scenario in which the EU has adopted CAP reforms of 2003 but EU enlargement has not taken place. In the first scenario, only the trade policy of the NMS is harmonized with the EU-15; thus, tariff rates in the NMS are adjusted to their levels in the EU-15. In the second scenario, all the changes in the agricultural and trade policies from accession are implemented in the grain sector of the NMS. In the third scenario, technology transfer is added to accession, where the grain yields in the NMS converge to the

average yield level in the EU-15. The net welfare changes in each scenario are calculated and compared.

To compute the net change in welfare, the change in tariff revenue, the change in producer surplus, the change in consumer welfare, and the change in the export subsidy expenditures are calculated for the NMS. The net change in welfare for the NMS can be either positive or negative, depending on the direction and the relative magnitudes of these changes.

Before the EU enlargement took place, there were many studies in the literature on the possible impacts of enlargement. However, these studies were based on conjectures on which countries would join, as well as the terms of the future agreements. Two new studies that incorporate the latest decisions of the Copenhagen agreement are discussed below.

Previously, Jensen and Frandsen (2003) analyzed the economic implications of the Copenhagen accession agreement for EU member states with a global general equilibrium model for the agricultural sector. The authors include welfare impacts of the accession and the budgetary costs for pre- and post-enlargement scenarios. They find enlargement to be primarily an intra-European event with minor impacts on countries outside Europe. However, this study does not incorporate the CAP reform of 2003, and it is based on Agenda 2000. Fabiosa et al. (2005) assess the impacts of EU enlargement and the CAP reform of 2003 separately. Their study focuses on international dairy, grains, livestock, oilseeds, and sugar markets. However, it does not provide any welfare analysis or a technology transfer scenario.

The model used in the present study includes the CAP reform of 2003 and the latest decisions on the phasing in of the CAP in the NMS. The analysis includes three different scenarios that decompose the different phases of the accession and its impact on the world grain markets. The third scenario adds a technology transfer scenario to the enlargement, as it is a

crucial outcome of the enlargement. It includes welfare analysis for the NMS in each scenario, thus distinguishing the different impacts of policy changes and technology transfer on welfare in the NMS.

The study finds that EU enlargement has important implications for the EU and the NMS, but its impact on world grain markets is minimal. However, adding technology transfer to the accession scenario results in much bigger impacts on world markets, particularly on grain prices. Producers in the NMS gain from the accession because they benefit from higher prices, while consumers face a net welfare loss in most of the NMS. Incorporating technology transfer into the accession increases the welfare gain of producers despite falling prices, as the supply shift is much larger in this scenario. The loss of welfare for consumers in most of the NMS is lower in this scenario because of the slight decline in grain prices brought about by the larger supply response.

The literature on immiserizing growth is helpful to an analysis of welfare effects of a technology transfer in the NMS. Bhagwati (1958) reintroduced the concept of immiserizing growth, i.e., that technical progress may reduce social welfare through adverse effects on the terms of trade in an economy. Johnson (1967) showed that growth could be immiserizing because of trade policy distortions even when the terms of trade do not change. Alston and Martin (1995) showed how the size and the distribution of benefits from research-induced supply shift depending on the nature of the supply shift, the nature of any market-distorting policies, and the terms-of-trade effects arising from technology transfer.

This study also explores the possibility of immiserizing growth in the grain sectors of the NMS after their accession to the EU. The calculation of welfare changes in the third scenario shows that this is not the case. In the third scenario, lower prices generated by the supply shift

were not large enough to create a negative change in producer surplus in the NMS. Although the export subsidy expenditures in the third scenario were much higher than in the second scenario, they were not high enough to generate a negative welfare change and lead to immiserizing growth.

The study proceeds as follows. The first section presents the general structure of the international grain model. This is followed by a description of the grain model for the NMS. The formulae used for welfare computations in each scenario are presented. Then, the three scenarios included in the study are described. The impact of technology transfer in grain markets and the different channels through which technology transfer in the NMS can take place are discussed next. The last two sections give the corresponding results and conclusions.

An International Grain Model

We start with the FAPRI International Grain Model, which is a non-spatial multi-market model composed of 40 countries and regions, including a rest-of-the world aggregate, but this model is augmented to incorporate technology transfer and computation of welfare changes in the NMS. The data sources included in the model are the Production, Supply and Distribution data set from the Foreign Agricultural Service of the U.S. Department of Agriculture, the International Financial Statistics historical macroeconomic data from the International Monetary Fund, and Global Insight's macro forecast for the outlook portion of the model. Necessary commodity prices and policy information come from U.S. Foreign Agricultural Service Attaché Reports, the World Trade Organization, publications of the Economic Research Service of the U.S. Department of Agriculture, EU Commission publications, and the CAP Monitor.

The commodities included in the model are barley, corn, sorghum, and wheat. Each country sub-model consists of at least one commodity depending on the relative importance of

the commodity and the relative importance of the country in the world markets as a supplier or a buyer. In terms of the structure of the models, the following identity is satisfied for each country, region, and the world: {Beginning stock + Production + Imports} = {Ending Stock + Consumption + Exports}. The detailed description of the model, agricultural and trade policy assumptions, and the major elasticities used in the model are provided on the FAPRI Web site (http://www.fapri.iastate.edu). Parameters in the model such as price and income responses are directly estimated, surveyed from the literature, or obtained from consensus of expert opinions (FAPRI 2005).

Production is divided into yield and area equations, while consumption is divided into feed and non-feed demand. In the EU model, a domestic price is solved for barley, corn, and wheat that will satisfy the above identity for all members of the EU-15 and NMS.

Agricultural and trade policies in each country are included in the model to the extent that they affect the supply and demand decisions of the economic agents. Taxes on exports and imports, tariffs, tariff rate quotas, export subsidies, intervention prices, and set aside rates in the EU are a few examples of the policies integrated into the model.

The grain model assumes that the existing agricultural and trade policy variables will remain unchanged in the outlook period. Macroeconomic variables, such as GDP, population, and exchange rates, are exogenous variables that drive the projections of the model.

A Grain Model for the NMS

For the Czech Republic, Hungary, and Poland, separate models are set up for barley, corn, and wheat. Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, and Slovenia are grouped together under the name "Other NMS." The sub-model for each country includes behavioral equations for area harvested, yield, production, and beginning stocks on the supply side, per

capita consumption, feed demand per grain consuming animal unit (GCAU), and ending stocks for the demand side. Net trade is a residual that equates supply and demand.

Below is the description of a generic model for each country, using corn as an example. The equation for area harvested for corn is written as

$$A_C = A(\pi_C, \pi_B) = \lambda + \delta \cdot \pi_C + \rho \cdot \pi_B = \lambda + \delta \cdot P_C \cdot y_C + \rho \cdot P_B \cdot y_B \qquad (1)$$

where P_C is the price of corn in real terms, y_C is the yield for corn, and P_B and y_B denote the real price and yield of the substitute crops respectively.

The production per hectare (yield) is set up as

$$\frac{\partial \pi}{\partial P_C^*} = y_C = \alpha + \beta \cdot P_C + \gamma \cdot Trend \qquad (2)$$

where a trend is included to capture the rate of technical change prior to the accession.

Combining equations (1) and (2), the corn production equation is derived as

$$S_C = (\lambda + \delta \cdot P_C \cdot y_C + \rho \cdot P_B \cdot y_B) \cdot (\alpha + \beta \cdot P_C + \gamma \cdot Trend) \qquad (3)$$

Corn consumption per capita is determined by real price of corn, real price of substitute crops, and income per capita as

$$D_C = f(P_C, P_B, I) \qquad (4)$$

where I denotes per capita GDP.

Feed demand per GCAU is determined by lagged feed demand, real price of corn, and real price of substitute crops as

$$G_C = f(G_{C,t-1}, P_C, P_B) \qquad (5)$$

Ending stocks are determined by lagged ending stocks and real price of corn as

$$ES_C = f(ES_{C,t-1}, P_C) \qquad (6)$$

<center>**Measuring Welfare Changes**</center>

To calculate welfare changes, first a benchmark is established. Then, each scenario is evaluated relative to this benchmark using change in tariff revenue (TR), producer surplus (PS), equivalent variation (EV), and export subsidy expenditure (ES).[2]

Change in Tariff Revenue

Change in tariff revenue is written as

ΔTariff Revenue=(New Flow*New Tariff Rate*New Price)-(Old Flow*Old Tariff Rate*Old Price) (7)

Producer Surplus

The formula used for computation of the producer surplus is

$$\Delta PS = \int_{\bar{\pi}}^{\hat{\pi}} L_x(x)dx \qquad (8)$$

where $\hat{\pi}$ represents the profits in each scenario and $\bar{\pi}$ represents the benchmark profits. L_x is the land allocated to the specific commodity.

Consumer Welfare

Equivalent variation (EV) is used to measure the change in consumer welfare. An incomplete demand system approach (LINQUAD) is used as it allows an exact welfare measure to be derived from it (LaFrance 1998; LaFrance et al. 2002; and Agnew 1998).

First, a representative consumer with an expenditure function $e = f(P,U)$ is assumed, where P is a vector of consumer prices, $P = (P_C, P_B, P_{OG})$, and U denotes utility. In the example below, the focus is on a two-good case of the utility function that includes corn and barley. Each country has a different consumption equation for each commodity, and the EV calculation has been adjusted for each different case. P_C denotes the price of corn, P_B denotes the price of

barley, P_{OG} refers to the price of all other goods that are included for completeness, and

M denotes income.

The Marshallian demands for corn and barley, denoted by D_C and D_B respectively, are

derived as follows:

$$D_C(P_C,P_B,M) = \xi_C + v_C \cdot P_C + x_C \cdot (M - \xi_C \cdot P_C - \xi_B \cdot P_B - 0.5 \cdot v_C \cdot P_C{}^2 - 0.5 \cdot v_B \cdot P_B{}^2) \qquad (9)$$

and

$$D_B(P_C,P_B,M) = \xi_B + v_B \cdot P_B + x_B \cdot (M - \xi_C \cdot P_C - \xi_B \cdot P_B - 0.5 \cdot v_C \cdot P_C{}^2 - 0.5 \cdot v_B \cdot P_B{}^2) \qquad (10)$$

for all countries.

In the next step, the following system of equations is solved with the above two equations

to obtain the parameters $\xi_B, v_B, x_B, \xi_C, v_C, x_C$:

$$\frac{\partial D_B}{\partial P_B} = v_B - x_B \cdot (\xi_B + v_B \cdot P_B) \qquad (11)$$

$$\frac{\partial D_B}{\partial M} = x_B \qquad (12)$$

$$\frac{\partial D_C}{\partial P_C} = v_C - x_C \cdot (\xi_C + v_C \cdot P_C) \qquad (13)$$

$$\frac{\partial D_C}{\partial M} = x_C \qquad (14)$$

The solution allows exact identification of all cross-price responses to the system, as ξ, v

and x are then known parameters. Based on equations (9) and (10), the EV is derived as

$$EV = \left\{ \left[M - \xi_C \cdot P_C{}^1 - \xi_B \cdot P_B{}^1 - 0.5 \cdot v_C \cdot (P_C{}^1)^2 - 0.5 \cdot v_B \cdot (P_B{}^1)^2 \right] * \exp\left(-\left(x_C \cdot P_C^1 + x_B \cdot P_B^1 \right) + \left(x_C \cdot P_C^0 + x_B \cdot P_B^0 \right) \right) \right.$$

$$\left. - \left[M - \xi_C \cdot P_C{}^0 - \xi_B \cdot P_B{}^0 - 0.5 \cdot v_C \cdot (P_C{}^0)^2 - 0.5 \cdot v_B \cdot (P_B{}^0)^2 \right] \qquad (15) \right.$$

where 0 and 1 denote the initial and the final prices, respectively.

Export Subsidy

An effective export subsidy rate is calculated for each commodity for the EU-15 by using the latest available value of export subsidy expenditure and the FOB values of exports for that year.

$$\text{Per unit export subsidy rate} = \frac{(ER)}{(EX)} \tag{16}$$

where ER denotes the value of export refunds (export subsidy expenditures), and EX represents the value of exports (FOB price times total exports). This subsidy rate is used for each NMS to calculate its export subsidy expenditures and the changes after each scenario. Thus, the total export subsidy expenditure gets evenly distributed with respect to the export shares of each country for each commodity. The export subsidy expenditure for each country and commodity is calculated by multiplying the export subsidy rate by the FOB price of the commodity and the third-country[3] exports.

The subsidy rate for each commodity in the EU is calculated based on the latest available data. This subsidy rate is used across all the acceding countries to be consistent, which resulted in an even distribution of export subsidies to acceding countries with respect to their export shares. However, some of the acceding countries had export subsidies prior to the enlargement, and ambiguity about their future utilization has prompted the above methodology. Thus, the utilization of export subsidies by the NMS after joining the EU may differ from the one described in this study.

The net change in welfare is computed as

$$\Delta Welfare = \Delta TR + \Delta PS + EV - \Delta ES \tag{17}$$

<div align="center">**Scenarios**</div>

First, a benchmark scenario (baseline) is set up that includes the CAP reform of 2003 in the EU without accession. This is necessary in order to be able to trace the impact of policy changes and technology transfer on grain sectors of the candidate countries and the resulting welfare changes.

In Scenario 1, only the changes in the tariff rates for barley, corn, and wheat in the NMS are incorporated into the model. The pre-accession and post-accession tariff rates for the Czech Republic, Hungary, Other NMS, and Poland are given below in Table 1.

Table 1. Tariff rates in the New Member States (10-year average)

	Czech Republic (percent)	Hungary (percent)	Other NMS (percent)	Poland (percent)
Wheat				
Pre-accession	21.20	32.00	31.76	22.50
Post-accession	10.43	10.43	10.43	10.43
Corn				
Pre-accession	17.00	32.00	14.33	20.00
Post-accession	25.67	25.67	25.67	25.67
Barley				
Pre-accession	21.20	32.80	33.04	20.00
Post-accession	14.64	14.64	14.64	14.64

Note: Other NMS includes Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, and Slovenia. Their tariff rates are an average of each individual country tariff rate weighted by production.

Scenario 2 includes full accession of the 10 NMS in May 2004. NMS adopt the CAP but with certain changes in the policy variables that allow them to phase in the changes. The policy changes are given in Table 2 and Table 3. A major instrument of the CAP is arable area payments to farmers. EU-15 will provide a portion of these payments, whereas the NMS can provide up to 30% of these payments through different resources. The Single Farm Payment will be a part of CAP for the NMS at the time of entry; thus, the decoupling rate is set to 100% in the model for the NMS. Set-aside starts in 2009 at 10% and remains the same throughout the rest of

the projection period. Some of the NMS had export subsidy policies prior to accession. With the

enlargement, all of the NMS will become part of the EU export subsidy policy. The upper limit

for EU-25 for the wheat export subsidy is 14.4 million metric tons and 1.3 billion euros. For

coarse grain export subsidies, this upper limit is 10.8 million metric tons and 1.0 billion euros.

Scenario 3 incorporates technology transfer to the NMS as well as the full accession. The

technology transfer scenario is based on the idea of NMS agricultural sectors "catching up" with

the agricultural sectors of the EU countries. The average level of yields in the EU-15 and the

respective yields in the NMS are compared as a first step. The main rationale is that the yields in

the EU-15 reflect the potential for the yield levels in the NMS. In other words, EU-15 yield

levels represent a frontier for the yields in the NMS.

Table 2. EU payments and top-up payments in the New Member States

Payments	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
					(Percent)					
Top-up	30	30	30	30	30	30	30	30	30	30
EU payments	25	30	35	40	50	60	70	70	70	70
Total	55	60	65	70	80	90	100	100	100	100

Table 3. Summary of CAP instruments in the New Member States

Policy	2004	2005	2006	2007	2008	2009
Decoupling Rate (percent)	100	100	100	100	100	100
Set-aside (percent)*	0	0	0	0	0	10
Durum aid (euro/mt)	313.0	291.0	285.0	285.0	285.0	285.0
Intervention price (euro/mt)	101.3	101.3	101.3	101.3	101.3	101.3
Arable Area Payment (euro/mt)	63.0	63.0	63.0	63.0	63.0	63.0

* Average set-aside prior to exemption for small producers

The next question in this context is how long it takes for the NMS to catch up. That is a difficult thing to predict, as it depends on the relative magnitude of the flow of FDI and the structure of farms in the NMS. In the first phase of the accession, the NMS will benefit from an initial flow of knowledge and capital from the EU member states. In the later stages, this flow of knowledge and capital will continue to aid restructuring of the farms and renewal of the production technology. Thus, in Scenario 3, the yield levels in the NMS increase in the first year of the accession and later start converging toward the average EU-15 level. How much should they converge to the EU-15 level? The projections are carried out 10 years ahead until the 2013/14 marketing year. Ten years will not be enough for all the NMS to catch up with the EU, given the gap between their yields. Thus, it is assumed that nearly 50% of the gap between yield levels will be reduced through technology transfer. The original yield levels in Scenario 2 and the new yield levels in Scenario 3 are given in Appendix Tables A.1 through A.3, along with the average EU-15 levels for each crop.

It should also be noted that the soil conditions and the climate impact the yield levels as much as the input levels and technology. Some candidate countries are located in different agro-ecological zones so their potential for yield growth may be different from each other. Therefore, choosing a technology transfer scenario in which the gap between the respective yields are narrowed rather than choosing a constant rate of yield growth allows the model to capture the different potentials for each crop in each country.

Impact of Technology Transfer in Grain Markets

Figure 1 shows the impact of technology transfer in the grain markets of the NMS. Panel (a) represents the domestic market and panel (b) represents the export market. This figure shows the case for a large country exporter with an export subsidy policy in place.

Price S_0 S_1

P_D^0 J   K

P_D^1 L   M

A

B

N

D_D

Quantity

C_0 C_1 Q_0 Q_1

(a) Domestic Market

ES_0

Price ES_1

E

P_D^0

P_D^1 F

P_W^0 C

P_W^1 D

ED_S

ED

Quantity

Q_E^0 Q_E^1

(b) Export Market
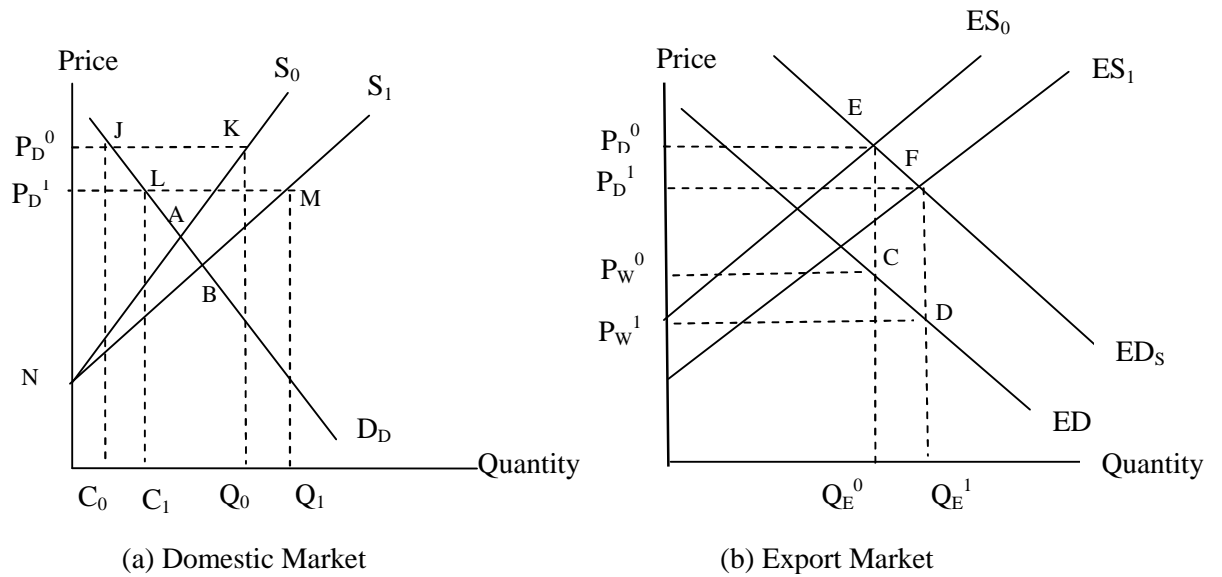
Figure 1. Effects of technology transfer on production, prices, and exports of grains in the NMS

In panel (a), point A denotes the autarky equilibrium. Point B represents the autarky equilibrium when the supply curve shifts in the NMS because of technical change after accession to the EU. The domestic price denoted by P_D^0 decreases to P_D^1 with the increased supply. A pivotal shift of the supply curve is shown in Figure 1, where Supply (S_0) shifts to S_1. A parallel shift or a combination of a pivotal and parallel shift is possible as well.

The export market is represented in panel (b) of Figure 1, where ED denotes excess demand without the export subsidy and ED_S denotes excess demand with the export subsidy. The rectangle ($P_D^0ECP_W^0$) represents the amount of export subsidy used before the supply shift. P_W^0 denotes the world price before the supply shift. In the export market, the excess supply (ES_0) shifts to ES_1 after the technology transfer, changing the export subsidy amount to the rectangle shown by ($P_D^1FDP_W^1$). Although the supply shift in the domestic market is pivotal, the supply shift in the export market is nearly parallel.

The welfare changes in the NMS from the technology transfer can be summarized as follows. The change in consumer surplus is equal to the area denoted by $(P_D^0 JLP_D^1)$, which is positive. The change in producer surplus is equal to the difference in the areas, i.e., $(P_D^1 MN)$ – $(P_D^0 KN)$, which can be either positive or negative. The increase in export subsidy expenditure is equal to the area (CDFE), which is positive. The net welfare change is equal to the change in consumer surplus plus the change in producer surplus minus the change in export subsidy. This net change in welfare can be positive or negative, depending on the relative magnitude of its components. If it is negative, then immiserizing growth occurs, i.e., the country is worse off after a supply increase due to technical change. If it is positive, then the country benefits from the technical change.

It is crucial to note that the nature of the supply shift and the size and nature of the trade distortion will determine whether there will be immiserizing growth or not. Alston and Martin (1995) discuss a set of conditions under which technological change can be immiserizing. Panel (a) illustrates a pivotal supply shift. In this case, there is a possibility of immiserizing growth even without trade distortion, as the change in producer surplus can be either positive or negative. If the supply shift had been parallel, then producers would have benefited alongside consumers, unless there is a trade distortion, such as export subsidies.[4]

The possibility of immiserizing growth further increases when we introduce the export market and the export subsidy into the analysis. In this case, there is a cost of the export subsidy that needs to be considered in the calculation of net welfare of the society. As seen in panel (b), the export subsidy cost increases with a supply shift as the producers export more and receive higher subsidies. Thus, net benefits from technical change are lower when there is a trade

distortion such as export subsidies. If the change in export subsidies is large enough to make the net benefits negative, then we have a case of immiserizing growth.

Sources of Technology Transfer and Yield Growth in the NMS

In terms of historical perspective, Eastern Europe and the Commonwealth of Independent States (CIS) were net food exporters early in the twentieth century. In the pre-Socialist period, average yields in Eastern Europe were only slightly lower than those in Western Europe. Tyers (1993) gives the example of Poland, where the average yield of wheat was equal to its counterpart in Western Europe, while the yield of barley was slightly below the barley yield in Western Europe.

The main reason for the lower yields in the NMS is the transition to a market economy, which started in 1989. This process included de-subsidization, de-collectivization, privatization, and price liberalization in the agricultural sector. These structural changes contributed to a lack of financial capital in the agricultural sector and less use of inputs. Consequently, yield levels in the grain sector decreased considerably.

In determining the impact of technology transfer, it is critical to assess correctly the potential for yield growth for the grains. However, the previous literature on the subject is limited. Tyers (1993) utilizes three growth and productivity scenarios for post-Socialist economies. The first one is a benchmark against which other scenarios can be compared. The other two scenarios are "low growth" and "high growth." In the "low growth" scenario, there is no technology catch-up and the growth rates settle down to their pre-reform values after a decline. In the "high growth" scenario, wheat yields increase 10% over the benchmark, and coarse grain yields increase 5% over the benchmark. However, Tyers' work does not incorporate

a possible EU enlargement and therefore underestimates the potential for technology transfer that might be brought on by it.

Different channels have been described in the literature in terms of the sources of technology transfer from the EU-15 to the Central and Eastern European countries that will increase the productivity of the farming systems, and therefore the yields. The first and the most often-cited channel is the replacement of technically obsolete machinery and equipment. The prices and the availability of machinery and equipment differ widely between the NMS and the EU-15 countries. For example, Heinrich (2001) gives a comparison of Hungary and Germany in terms of the number of tractors and gross investments of machinery. He notes that, in terms of inputs, an average Hungarian farm used roughly three-quarters of the tractors used by its German counterpart in 2000. Gross investments for machinery are more than three-fold for a German farm compared with a Hungarian farm in euros per hectare for 2000. These data show the potential for machinery use and investment for technical equipment in the NMS that has not yet been realized. This is especially true when productivities of machinery are compared. In Hungary, the productivity of machinery for wheat production is 8.9 (100 kg/hour), nearly half of the productivity in Germany, which is 16.4 (Heinrich 2001). Although a Hungarian farm can work with less machinery than a German farm (because of different climate factors), the gap in the productivity shows the potential gains from new and improved machinery.

Purchases of new machinery and equipment will be possible since the financial situation of farmers in the NMS will improve considerably with the accession. Through imports of newly built machinery from the EU-15 or other countries, the productivity of farms will increase. Pawlak and Muzalewski (2001) note that in Poland the share of imported newly built tractors from Western countries increased from 0.3% in 1995 to 6.1% in 2000. Higher farm income,

combined with the increased trade relations with the other EU members, may increase this ratio. Another difference is the ratio of yearly purchased newly built tractors with respect to tractors in use. This ratio is lower in Poland compared with the EU-15: 0.55% for Poland in 1998 and between 0.72% and 3.04% for the EU-15. As the machinery fleet is getting older, the farmers are not benefiting from technological improvements that increase the productivity of new tractors.

The other possible channel of technology transfer is the seed market. Duczmal (2001) reports that on the seed markets of countries in transition, only the varieties included in the "National List of Varieties" can be introduced. In this National List, up to 1989, there were mainly domestic varieties: between 54% and 99%. However, in the last decade, the proportion of domestic varieties decreased to 50% to 60% of the total, while the number of varieties almost doubled. International seed companies with well-organized "transfer of technology" systems have entered Central and Eastern European markets. Duczmal notes that some of these companies set up their own research stations and processing plants, while most concentrated on production hybrid seeds of corn, oilseed crops, and vegetables. Turi (2001) reports on the increased activities of multinational corporations in Hungary, along with the increased usage of foreign varieties. In 1990, domestic varieties made up 63% of all varieties, whereas by 2000 this percentage decreased to 30%. Turi notes that Hungary's hybrid corn seed improvement comes from multinational corporations' investments. For example, in 1990 Pioneer had almost 90% of the market, although this ratio has dropped since then. However, Hungarian-bred hybrid corn still had only 30% of the market.

Another channel for yield improvement has been biotechnology that has been introduced into Central and Eastern Europe. Field trials of transgenic crops started in multiple countries such as in Czech Republic for corn (Heffer 2001).

The next source of technical change is an increase in the flow of FDI to the NMS, such as Pioneer's investment in Hungary, which may be critical in the transfer of modern technology. However, not all Central and Eastern European countries have been equally attractive for FDI in the past. Although concentration has been mostly in Hungary, the Czech Republic, and Poland (Josling et al. 1997), acceding to the EU will increase the attractiveness of the other NMS and may increase FDI.

In this context, it is beneficial to refer to Pouliquen's (2001) extensive study on the relative competitiveness and farm incomes in Central and Eastern European agri-food sectors. Pouliquen claims that the relatively low yields in these countries are the result of the low use of purchased inputs. He notes that, with the exception of Slovenia, utilization of the main inputs is two to three times lower per agricultural hectare compared with the EU. He also shows that the level of capital invested per worker is lower in these countries than the French level. In terms of implications of the enlargement, he claims that the overall productivity in agri-food sectors will probably increase more from technological progress than from price increases, with the exception of rye. However, he also points out that the structures of small and medium-sized semi-subsistence holdings may prevent farmers from realizing these productivity gains. He notes that farmers in the NMS will receive higher incomes as a result of direct payments from the EU, which in turn will increase productivity and production. However, this is on the condition that these higher incomes are used for investment rather than for consumption or to pay for land price increases.

Results

Summaries of results from each scenario are presented in Tables 4 through 7 for the EU-15, world, Czech Republic, Hungary, Other NMS, and Poland grain markets. The average level

of prices, production, consumption and net trade (net exports) between the years 2004/05 and

2013/14 for the baseline are presented, as well as the average percentage change for these

variables in each scenario. Appendix Tables B.1 through B.17 show in detail the levels for the

baseline and each scenario as well as percentage changes throughout the projection period.

Table 4. Price effects of EU enlargement and technology transfer (10-year average)

	Baseline	Scenario 1 (percent)	Scenario 2 (percent)	Scenario 3 (percent)
EU-15 (Euros/metric ton)				
Wheat	115.08	0.09	-0.09	-0.72
Corn	124.21	0.03	-0.06	-0.29
Barley	109.35	0.10	-0.19	-0.97
World (US $/metric ton)				
Wheat	142.51	0.95	-0.70	-6.87
Corn	107.19	0.05	-0.86	-4.46
Barley	90.20	1.42	-3.04	-14.58
Czech Republic (Koruny /metric ton)				
Wheat*	5125.74	-8.02	35.46	34.41
Corn[†]	2206.32	7.47	37.02	36.55
Barley[‡]	5401.66	-4.06	13.77	12.85
Hungary (Florint /metric ton)				
Wheat	35637.70	-15.54	36.15	35.09
Corn	21449.53	-4.74	40.13	39.76
Barley	44226.07	-12.44	19.80	18.83
Other NMS (US $/metric ton)				
Wheat	215.95	-15.39	18.60	17.68
Corn	98.04	9.98	40.22	39.85
Barley	168.00	-12.60	36.28	35.18
Poland (Zlotys/metric ton)				
Wheat	629.49	-8.99	-11.09	-11.78
Corn	337.35	4.78	33.60	33.24
Barley	514.23	-3.10	-2.75	-3.53

* U.S. FOB Gulf Price
[†] U.S. FOB Gulf Price
[‡] Canada Feed Price

Table 5. Impact of scenarios on production (10-year average)

	Baseline (thousand mt)	Scenario 1 (percent)	Scenario 2 (percent)	Scenario 3 (percent)
EU-15				
Wheat	104875.71	0.02	-0.02	-0.17
Corn	38925.68	0.00	0.00	0.00
Barley	51977.20	0.02	-0.04	-0.20
World				
Wheat	624234.82	-0.02	0.02	0.61
Corn	678207.91	0.01	-0.01	0.12
Barley	151655.51	-0.03	0.15	1.19
Czech Republic				
Wheat	3845.77	-2.45	4.63	19.27
Corn	513.92	19.91	4.44	18.33
Barley	2373.65	-2.03	4.64	16.49
Hungary				
Wheat	3845.76	-2.71	5.41	35.91
Corn	5408.73	0.54	4.99	38.10
Barley	927.26	-2.95	5.64	38.00
Other NMS				
Wheat	3211.92	-5.66	9.14	53.88
Corn	1096.74	8.09	1.87	38.91
Barley	2520.99	-4.72	20.30	93.08
Poland				
Wheat	9564.82	-2.80	-4.44	28.72
Corn	1971.90	1.42	6.28	26.26
Barley	3419.99	-1.29	0.46	20.17

Table 6. Impact of scenarios on consumption (10-year average)

	Baseline (thousand mt)	Scenario 1 (percent)	Scenario 2 (percent)	Scenario 3 (percent)
EU-15				
Wheat	96328.88	-0.01	0.00	0.03
Corn	42194.42	0.00	-0.01	-0.01
Barley	47873.41	-0.01	0.01	0.10
World				
Wheat	624764.40	-0.01	0.02	0.55
Corn	678730.84	0.01	-0.01	0.10
Barley	151206.41	-0.03	0.16	1.16
Czech Republic				
Wheat	3139.94	1.51	-6.37	-6.19
Corn	613.68	-2.30	-3.69	-3.74
Barley	1421.58	3.73	-0.47	0.05
Hungary				
Wheat	3131.73	2.76	-5.76	-5.58
Corn	4037.48	-0.09	-4.78	-4.78
Barley	429.72	15.10	-15.29	-14.11
Other NMS				
Wheat	4308.14	4.21	-0.62	-0.60
Corn	2145.15	-2.19	-2.38	-2.41
Barley	3373.28	0.68	-5.48	-5.36
Poland				
Wheat	8757.18	2.40	4.51	4.63
Corn	2207.33	-0.57	-3.47	-3.46
Barley	3203.06	0.51	1.54	1.69

Table 7. Impact of scenarios on net trade (10-year average)

	Baseline (thousand mt)	Scenario 1 (percent)	Scenario 2 (percent)	Scenario 3 (percent)
EU-15				
Wheat	8263.99	0.35	-0.25	-2.48
Corn	-3498.78	0.02	-0.03	-0.14
Barley	3869.72	0.41	-0.85	-4.17
World				
Wheat	199335.78	-0.26	0.57	2.78
Corn	165340.19	-0.02	-0.08	-0.24
Barley	29437.93	1.25	-4.09	-10.08
Czech Republic				
Wheat	686.75	-24.57	70.70	160.22
Corn	-99.04	-22.11	-41.88	-98.10
Barley	952.06	-10.76	11.85	41.24
Hungary				
Wheat	706.18	-27.48	56.36	223.51
Corn	1357.73	2.41	35.00	167.63
Barley	498.24	-18.59	23.18	82.54
Other NMS				
Wheat	-1138.81	34.28	-29.24	-156.99
Corn	-1076.62	-12.48	-7.36	-45.35
Barley	-862.78	17.49	-83.32	-296.63
Poland				
Wheat	778.56	-66.72	-118.43	325.58
Corn	-229.02	-15.66	-79.33	-206.85
Barley	210.44	-51.58	-101.66	577.32

In Scenario 1, trade policies of the NMS were harmonized with that of the EU-15. Table 1 shows pre- and post-accession tariff rates. Some tariff rates increase in the NMS while others decrease, leading to different responses on the part of producers and consumers.

In Scenario 1, wheat prices decrease in all the NMS, leading to lower production and higher consumption levels. Net exports of the Czech Republic, Hungary, and Poland decrease, although these countries still remain net exporters. The Other NMS group was a net importer of

wheat in the baseline. With the decrease in production and increase in consumption, their net imports increase, showing a positive percentage change in net trade.

In Hungary, production of corn increases slightly, although the corn price decreases. As the decrease in corn price is lower on average than the decrease in wheat and barley prices, producers switch to corn. Consumption of corn is lower despite lower prices, as consumers switch to wheat and barley. All this leads to a rise in Hungary's net exports of corn in the Scenario 1. The price of corn rises in all of the other NMS, leading to higher production and lower consumption. The nine other NMS were net importers of corn in the baseline. In Scenario 1, their net imports decrease, thus leading to a negative sign in the percentage change of net trade.

The barley price decreases in all of the NMS, leading to lower production and higher consumption levels in Scenario 1. Barley net exports are lower in the Czech Republic, Hungary, and Poland. Being a net importer of barley in the baseline, the Other NMS group increases its net imports, causing a positive sign in the percentage change of net trade.

The impact of Scenario 1 on production, consumption, and net trade is minimal in the EU-15 and world grain markets. The prices of all three crops increase in the EU-15 and world markets because of the decrease in net exports of the NMS that decreases the supply in the world markets.

In Scenario 2, full accession of the NMS to the EU-15 is implemented. Tables 2 and 3 present the additional changes in the agricultural and trade policies, such as assumptions of top-up payments by the NMS, the decoupling rate, area payments, and export subsidies.

With the full accession, wheat prices increase in all of the NMS except Poland. As a result, wheat consumption falls in the Czech Republic, Hungary, and Other NMS, and

production increases. The increase in production is smaller after 2009/10 with the introduction of the set-aside. Net exports of Hungary and the Czech Republic increase, whereas net imports of Other NMS fall. Poland experiences a fall in the wheat price, accompanied by an increase in consumption and a decrease in production. This decreases wheat net exports of Poland. After 2009/10, Poland becomes a net importer of wheat in Scenario 2.

Wheat prices in the EU-15 and world markets decrease with the enlargement, though to a lesser extent in the EU-15. Net exports from the NMS increase in the Scenario 2 until 2008/09. After that, the set-aside is introduced, leading to lower net exports from the NMS. Still, on average, net exports from the NMS increase, increasing the supply in world markets and lowering prices on average. The impact on EU-15 and world consumption and production is minimal.

Corn prices increase in all NMS, which causes a drop in corn consumption and an increase in corn production in all NMS on average. The increase in production lessens after 2009/10 because of set-aside, and there is even a small decline in Other NMS. Czech Republic, Other NMS, and Poland, which were net corn importers in the baseline, decrease their corn net imports. Poland becomes a net exporter of corn in some years. Hungary, benefiting from the higher production and lower consumption levels, increases its net exports considerably.

EU-15 and world corn prices are lower in Scenario 2, though the impact on consumption and production is much smaller. The increase in corn production and the decrease in corn consumption in total for the NMS turn them from a net importer in the baseline into a net exporter in Scenario 2. The increased supply in world markets decreases the corn price, though this impact is less than 1% on average in the world.

Barley prices increase in the Czech Republic, Hungary, and Other NMS. Consequently, consumption falls and production increases in these NMS. The Czech Republic and Hungary, net exporters of barley in the baseline, increase their net exports. The Other NMS group decreases its net imports of barley. In Poland, barley prices fall with the accession, leading to higher consumption. However, barley production increases despite falling prices until 2009/10. This is due to the sharper decline in the wheat price in Poland with the accession. Producers partially switch to barley, and production of barley is slightly higher. In 2009/10, the set-aside kicks in, decreasing the barley production in Poland. Net exports of barley fall with the higher consumption levels.

Accession increases barley production in the NMS and decreases consumption. The resulting higher net exports of barley from the NMS decrease the barley price in world markets and the EU-15. Thus, barley consumption is slightly higher in the EU-15 and barley production is lower. Both production and consumption of world barley increase.

Scenario 3 combines EU enlargement with the technology transfer to the NMS. This increases the supply response of the NMS compared to Scenario 2. Production in the NMS increases for all three crops. The subsequent shift in the yield functions for the three crops in the NMS is given in Appendix Tables A.1 through A.3. The responses of prices and consumption in the Scenario 3 for the NMS are very similar to their responses in Scenario 2 with only the accession. The larger increase in production increases the change in net trade values of the NMS compared to Scenario 2. Wheat net exports of the Czech Republic, Hungary, and Poland increase between 70% and 325% on average. The Other NMS group was a net importer of wheat in the baseline. In Scenario 3, Other NMS becomes a net exporter of wheat. The Czech Republic's and the Other NMS group's corn net imports decrease more than 50% on average. Hungary increases

its corn net exports by 1.7 million metric tons on average. Poland becomes a net exporter of corn in Scenario 3. Barley net exports of the Czech Republic, Hungary, and Poland increase significantly. Net importers of barley in the baseline, the Other NMS group becomes a net exporter in the Scenario 3.

This substantial increase in the production of the three crops and the resulting change in net trade of the NMS have larger impacts in the EU-15 and world grain markets. Prices of the three crops decrease more in the EU-15 and world markets. On average, the world wheat price decreases nearly 7%, the corn price decreases approximately 5%, and the barley price decreases the most, at 15%. The impact on world production and consumption are smaller compared with the prices but larger compared with Scenario 2.

In Scenario 3, the prices in the EU decrease more than they did in Scenario 2. Thus, the NMS face lower prices compared with Scenario 2. Production and consumption in the EU-15 change minimally, though the net exports of wheat decrease 2.5% on average and net exports of barley decrease 4% on average. Corn net imports decrease 0.14% on average.

Tables 8 through 10 present the change in welfare in the NMS for each scenario. The detailed welfare changes for each crop are given in Appendix Tables C.1 through C.3. The change in welfare is computed for the marketing year 2013/14 and reported in thousand U.S. dollars at 1995 prices.

In Scenario 1, all NMS have a negative change in welfare as seen in Table 8. The loss of welfare for the NMS ranges between US$6,358 and US$20,697. As can be seen in Table 8, the lower prices in the NMS affect producers negatively and the change in producer surplus is negative for all NMS. However, consumers benefit from the harmonization of trade policies with the EU-15. The EV is positive for all NMS.

Table 9 shows the change in welfare from Scenario 2, i.e., accession without the technology transfer. Czech Republic has a net welfare gain of US$428,450. Hungary gains US$366,730, Other NMS gains US$429,632, and Poland gains US$467,797. The main component of the welfare gain for NMS is the increase in producer surplus. Producers in the NMS benefit from higher prices, whereas consumers are worse off in this scenario, except for Poland where the wheat and barley prices decrease. The EV is negative in all NMS, except for Poland. Export subsidy expenditures, though benefiting exporters and producers, decrease the net welfare gain of the NMS. The change in tariff revenue is negative for all NMS except for Other NMS. In total, the NMS gain from accession to the EU, but the producers are the main beneficiaries of this enlargement.

Table 8. Welfare effects of Scenario 1 in grains market (1000 US$ at 1995 prices for 2013/14)

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	-13522.52	2431.97	0.00	-16.25	-11106.80
Hungary	-9258.87	2363.79	0.00	-11.94	-6907.02
Other NMS*	-26608.82	5641.79	0.00	0.00	-20697.03
Poland	-7676.25	1317.79	0.00	0.00	-6358.46

*Other NMS includes Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, and Slovenia.

Table 9. Welfare effects of Scenario 2 in grains market (1000 US$ at 1995 prices for 2013/14)

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	570666.44	-76214.68	65976.96	-23.81	428450.99
Hungary	452051.62	-54191.20	31104.50	-25.30	366730.62
Other NMS*	503295.68	-67364.73	6301.54	2.85	429632.26
Poland	413900.10	54148.58	249.12	-1.57	467797.99

*Other NMS includes Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, and Slovenia.

Incorporating technology transfer to the accession scenario increases the net welfare gains of the NMS as seen in Table 10. The Czech Republic increases its welfare gain to US$571,604. Hungary gains US$582,633, Other NMS gains US$720,837, and Poland gains US$773,743. In this scenario, the increase in export subsidy expenditures is much higher compared to Scenario 2 for all NMS except for Poland because of the higher production and export levels. As previously discussed, prices in the EU decrease more in Scenario 3. Therefore, the NMS face lower prices compared with Scenario 2, though much higher compared with the baseline. Thus, the loss of consumer welfare is less for most of the NMS. Poland has a higher EV, and Polish consumers benefit more in Scenario 3. However, the increase in production and therefore the fall in prices are not enough to generate a positive EV. The change in producer surplus is higher in Scenario 3 for all NMS because of higher production levels, despite the fall in prices relative to Scenario 2. Again, the producers in the NSM are the major beneficiaries of technology transfer and accession to the EU though the welfare loss to consumers is less.

When comparing results for welfare in Scenarios 2 and 3, it is necessary to remember the immiserizing growth literature. This literature shows that changes in terms of trade or policy distortions may decrease the welfare in a country after a technical change occurs. In this study,

Table 10. Welfare effects of Scenario 3 in grains market (1000 US$ at 1995 prices for 2013/14)

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	726782.86	-73820.59	81346.55	-11.11	571604.61
Hungary	695933.01	-52853.34	60446.19	0.14	582633.62
Other NMS*	835283.25	-64796.79	49679.77	30.59	720837.28
Poland	715773.24	58207.50	235.31	-1.59	773743.84

* Other NMS includes Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, and Slovenia.

lower prices generated by the supply shift were not large enough to create a negative change in producer surplus in the NMS. The export subsidy expenditures in Scenario 3 compared with those in Scenario 2 were much higher but not large enough to compensate for the increase in producer surplus and to lead to immiserizing growth. Thus, immiserizing growth does not occur in this accession and technology transfer scenario.

Conclusions

This study analyzes the impacts of EU enlargement and technology transfer on the EU, the NMS, and world grain markets. To this end, a multi-market, non-spatial, partial-equilibrium model of world grain markets for the EU-15, the NMS, and other major countries and regions was used. First, a benchmark scenario is set up that includes the 2003 CAP reform of the EU. Then, two scenarios that incorporate two different phases of the EU enlargement are run. A third scenario includes full accession of the NMS to the EU-15 as well as technology transfer that is incorporated into the model of the third scenario in the form of a convergence of grain yields in the NMS to the average yield level in the EU-15. The consequent welfare changes in the acceding countries are computed for each scenario.

The first two scenario results show that the impact of EU enlargement on the world grain markets is minor. However, a scenario that combines the enlargement with the technology transfer gives a different outcome. The impact on world grain markets is larger as seen in the much lower world grain prices.

In the EU-15, accession leads to lower grain prices and lower net exports. The effect on production and consumption is minimal. On the other hand, Scenario 3, which generates a much bigger supply shift in the NMS, affects EU grain markets to a greater extent. The decrease in EU

grain prices is higher, which in turn decreases the price hike that most NMS face in the aftermath of the accession.

The NMS have a net welfare gain from the accession to the EU. The producers in the NMS are the beneficiaries of the accession, whereas consumers face a welfare loss because of increasing prices, except in the case of Poland. This welfare gain increases considerably when technology transfer from the EU-15 to the NMS is taken into consideration. In Scenario 3, technology transfer, combined with the accession, increases the supply response of producers and the change in producer surplus in Scenario 3 is much higher than in Scenario 2. Despite falling prices in the EU, producers more than compensate with the higher supply response and increase their welfare gain. The lower prices compared with Scenario 2 help consumers and the loss of welfare is smaller in Scenario 3. In Scenarios 2 and 3, producers and exporters also gain from export subsidies that decrease net welfare gain.

This study also explores the possibility of immiserizing growth in the grain sectors of the NMS after acceding to the EU. The possibility of deterioration in the terms of trade and the use of export subsidies create conditions that may lead to immiserizing growth, i.e., a negative net welfare change after technical change. The computation of welfare changes in Scenario 3 shows that this is not the case. In Scenario 3, lower prices generated by the supply shift were not large enough to create a negative change in producer surplus in the NMS. The export subsidy expenditures in Scenario 3 were much higher than in Scenario 2 but not high enough to compensate for the increase in producer surplus and lead to immiserizing growth. Thus, immiserizing growth does not occur in this scenario.

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Endnotes

1. Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia.

2. All welfare calculations are computed for the year 2013/14, which is the marketing year that starts in 2013 and ends in 2014.

3. Third-country exports include exports to all countries except the EU-15 and the 10 NMS.

4. See Bhagwati (1958) and Johnson (1958) for a discussion of immiserizing growth in the absence of distortions when demand is inelastic.

Appendix Tables

Table A.1. Convergence of Wheat Yield Rates for NMS

Wheat Yield for Czech Republic

(metric ton/hectare)

● EU-15 ■ Original Yield ▲ New Yield

Wheat Yield for Hungary

(metric ton/hectare)

● EU-15 ■ Original Yield ▲ New Yield
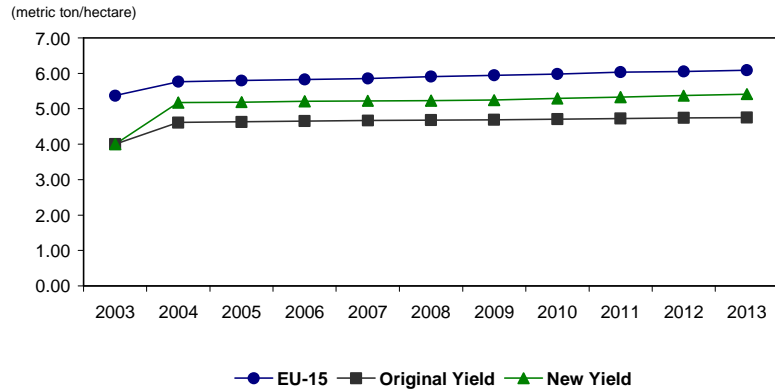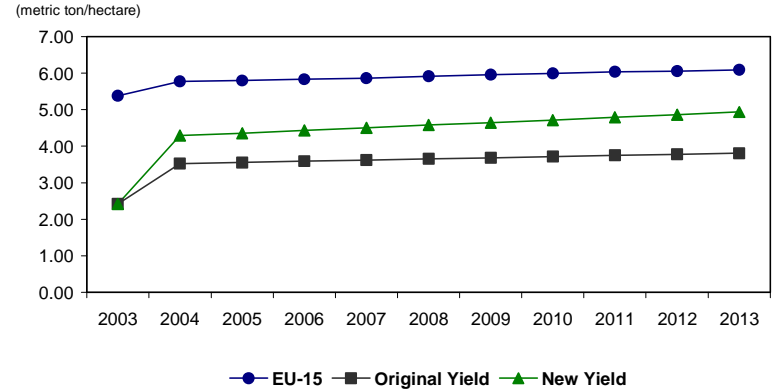
Wheat Yield for Other NMS

(metric ton/hectare)

● EU-15 ■ Original Yield ▲ New Yield

Wheat Yield for Poland

(metric ton/hectare)

● EU-15 ■ Original Yield ▲ New Yield

36
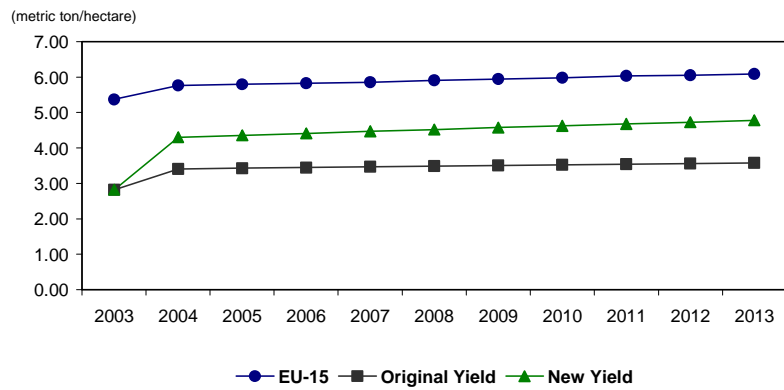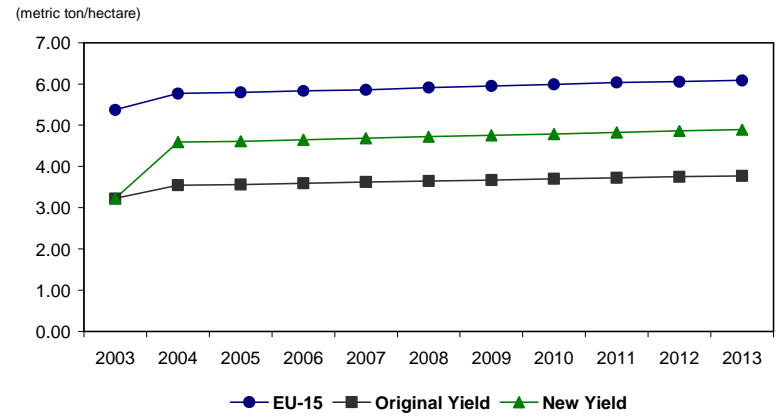
Table A.2. Convergence of Corn Yield Rates for NMS

Corn Yield for Czech Republic

(metric ton/hectare)

EU-15 ■ **Original Yield** ▲ **New Yield**

Corn Yield for Hungary

(metric ton/hectare)

EU-15 ■ **Original Yield** ▲ **New Yield**
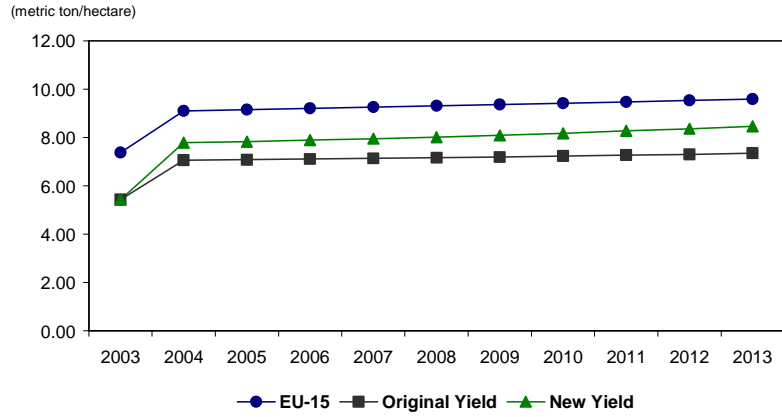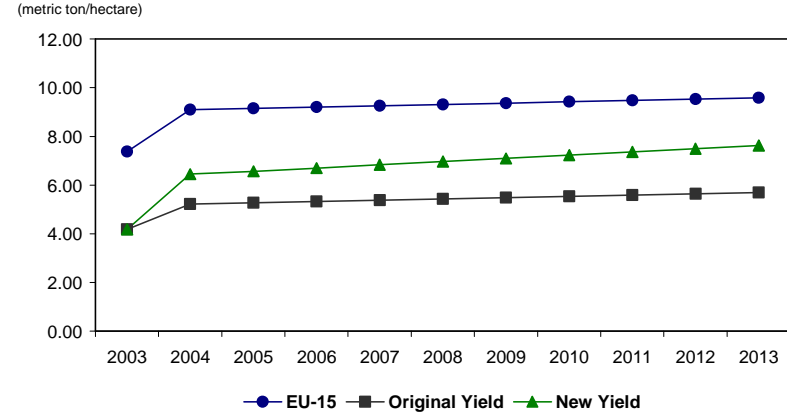
Corn Yield for Other NMS

(metric ton/hectare)

EU-15 ■ **Original Yield** ▲ **New Yield**

Corn Yield for Poland

(metric ton/hectare)
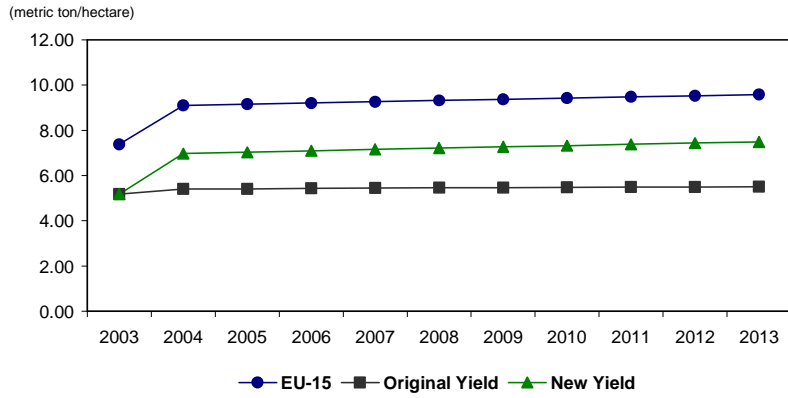
EU-15 ■ **Original Yield** ▲ **New Yield**
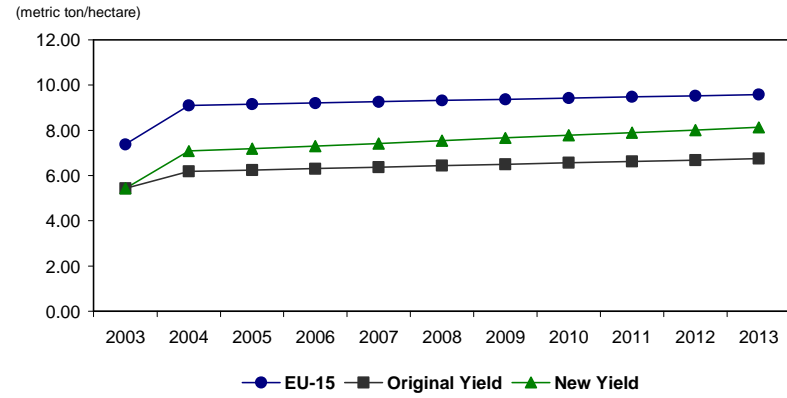
Table A.3. Convergence of Barley Yield Rates for NMS

Barley Yield for Czech Republic

(metric ton/hectare)

EU-15 — Original Yield — New Yield
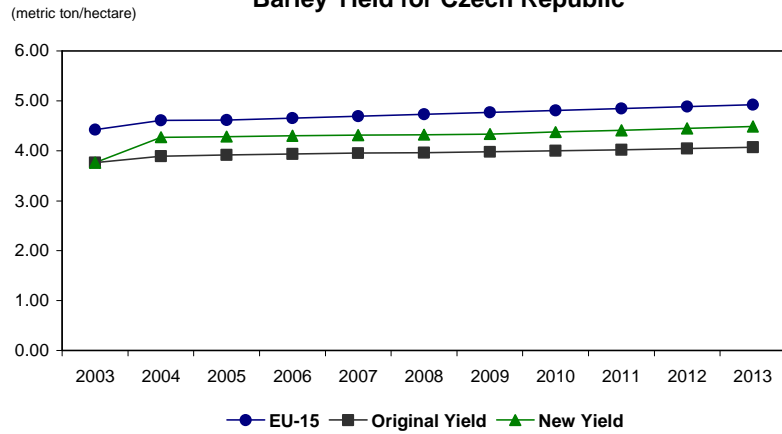
Barley Yield for Hungary

(metric ton/hectare)

EU-15 — Original Yield — New Yield
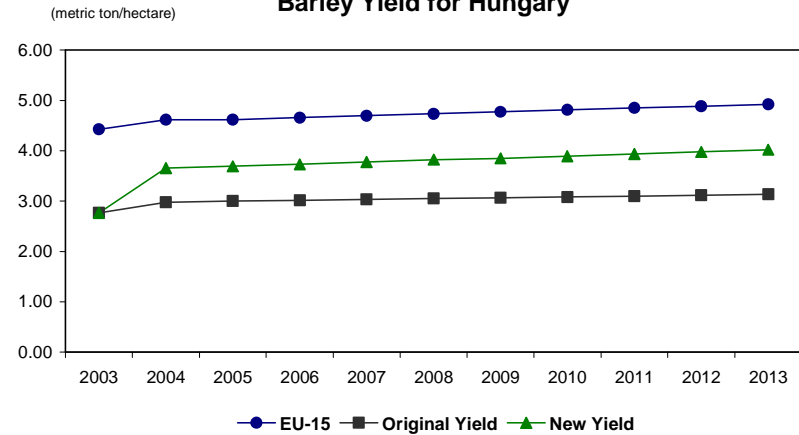
Barley Yield for Other NMS

(metric ton/hectare)

EU-15 — Original Yield — New Yield

Barley Yield for Poland

(metric ton/hectare)
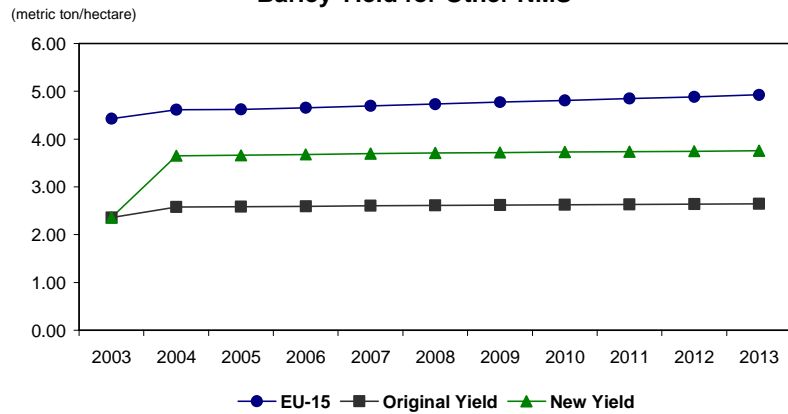
EU-15 — Original Yield — New Yield
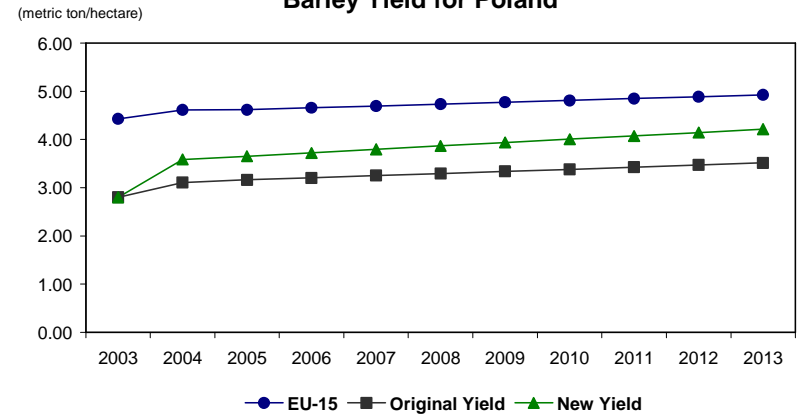
Table B.1. Impacts of EU Enlargement on Czech Republic Wheat

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested					(Thousand Hectares)						
Baseline	650	746	786	802	812	829	845	862	882	900	919
Scenario 1	650	746	764	781	793	810	827	845	865	884	903
Scenario 2	650	746	834	848	864	878	847	861	880	896	914
Scenario 3	650	746	852	865	879	892	860	873	891	908	926
Impact of Scenario 1 (%)	0.00	0.00	-2.88	-2.60	-2.37	-2.21	-2.04	-1.92	-1.84	-1.79	-1.72
Impact of Scenario 2 (%)	0.00	0.00	6.08	5.77	6.38	5.94	0.35	-0.04	-0.23	-0.44	-0.60
Impact of Scenario 3 (%)	0.00	0.00	8.40	7.82	8.27	7.64	1.79	1.26	1.08	0.86	0.70
Yield					(Metric Tons per Hectare)						
Baseline	4.00	4.51	4.53	4.54	4.56	4.57	4.59	4.61	4.63	4.65	4.67
Scenario 1	4.00	4.48	4.50	4.51	4.53	4.55	4.57	4.59	4.61	4.63	4.65
Scenario 2	4.00	4.61	4.63	4.66	4.67	4.68	4.69	4.71	4.73	4.74	4.76
Scenario 3	4.00	5.18	5.19	5.21	5.23	5.23	5.25	5.29	5.33	5.37	5.41
Impact of Scenario 1 (%)	0.00	-0.71	-0.63	-0.58	-0.54	-0.50	-0.47	-0.46	-0.44	-0.43	-0.42
Impact of Scenario 2 (%)	0.00	2.24	2.40	2.56	2.49	2.37	2.23	2.17	2.10	2.05	1.95
Impact of Scenario 3 (%)	0.00	14.76	14.62	14.80	14.66	14.45	14.32	14.79	15.21	15.65	16.02
Production					(Thousand Metric Tons)						
Baseline	2,600	3,366	3,559	3,643	3,700	3,790	3,877	3,972	4,080	4,183	4,288
Scenario 1	2,600	3,342	3,435	3,527	3,593	3,687	3,780	3,878	3,987	4,091	4,197
Scenario 2	2,600	3,442	3,866	3,951	4,034	4,110	3,977	4,057	4,156	4,250	4,345
Scenario 3	2,600	3,863	4,422	4,509	4,593	4,669	4,511	4,618	4,751	4,879	5,009
Impact of Scenario 1 (%)	0.00	-0.71	-3.49	-3.17	-2.90	-2.70	-2.51	-2.37	-2.28	-2.21	-2.13
Impact of Scenario 2 (%)	0.00	2.24	8.62	8.47	9.03	8.45	2.59	2.12	1.87	1.60	1.34
Impact of Scenario 3 (%)	0.00	14.76	24.25	23.77	24.14	23.19	16.37	16.24	16.46	16.65	16.83
Domestic Supply											
Baseline	3,298	3,764	3,935	4,057	4,159	4,286	4,405	4,527	4,645	4,758	4,871
Scenario 1	3,298	3,740	3,850	3,987	4,096	4,224	4,346	4,469	4,588	4,699	4,813
Scenario 2	3,298	3,840	4,120	4,203	4,310	4,420	4,325	4,440	4,556	4,663	4,770
Scenario 3	3,298	4,261	4,681	4,766	4,875	4,984	4,864	5,005	5,156	5,297	5,439
Impact of Scenario 1 (%)	0.00	-0.63	-2.18	-1.74	-1.53	-1.43	-1.33	-1.27	-1.24	-1.23	-1.19
Impact of Scenario 2 (%)	0.00	2.01	4.70	3.59	3.62	3.14	-1.81	-1.93	-1.93	-1.98	-2.06
Impact of Scenario 3 (%)	0.00	13.20	18.94	17.46	17.20	16.30	10.44	10.57	10.98	11.34	11.67
Feed Use											
Baseline	1,500	1,497	1,502	1,549	1,565	1,586	1,602	1,612	1,623	1,637	1,650
Scenario 1	1,500	1,541	1,537	1,581	1,596	1,615	1,629	1,638	1,649	1,662	1,675
Scenario 2	1,500	1,340	1,362	1,395	1,420	1,447	1,470	1,483	1,496	1,512	1,531
Scenario 3	1,500	1,345	1,366	1,399	1,423	1,451	1,474	1,486	1,499	1,515	1,534
Impact of Scenario 1 (%)	0.00	2.95	2.34	2.08	1.94	1.79	1.67	1.62	1.58	1.53	1.52
Impact of Scenario 2 (%)	0.00	-10.46	-9.32	-9.94	-9.30	-8.78	-8.22	-8.02	-7.85	-7.68	-7.23
Impact of Scenario 3 (%)	0.00	-10.16	-9.04	-9.68	-9.06	-8.56	-8.01	-7.81	-7.65	-7.48	-7.04
Consumption											
Baseline	3,100	3,061	3,071	3,122	3,137	3,156	3,168	3,168	3,169	3,174	3,175
Scenario 1	3,100	3,128	3,127	3,173	3,185	3,201	3,210	3,209	3,210	3,214	3,215
Scenario 2	3,100	2,841	2,865	2,896	2,922	2,951	2,974	2,978	2,983	2,991	3,001
Scenario 3	3,100	2,848	2,872	2,902	2,928	2,956	2,979	2,983	2,988	2,995	3,006
Impact of Scenario 1 (%)	0.00	2.21	1.82	1.64	1.54	1.43	1.35	1.31	1.29	1.25	1.25
Impact of Scenario 2 (%)	0.00	-7.17	-6.70	-7.21	-6.84	-6.50	-6.12	-5.99	-5.88	-5.78	-5.48
Impact of Scenario 3 (%)	0.00	-6.95	-6.49	-7.02	-6.66	-6.33	-5.96	-5.83	-5.72	-5.63	-5.33
Domestic Use											
Baseline	3,498	3,437	3,486	3,581	3,633	3,684	3,722	3,733	3,744	3,757	3,764
Scenario 1	3,498	3,543	3,586	3,676	3,722	3,768	3,801	3,810	3,819	3,830	3,836
Scenario 2	3,498	3,095	3,117	3,172	3,232	3,299	3,357	3,378	3,396	3,416	3,439
Scenario 3	3,498	3,107	3,129	3,184	3,244	3,309	3,367	3,387	3,406	3,425	3,448
Impact of Scenario 1 (%)	0.00	3.09	2.89	2.65	2.47	2.28	2.12	2.05	2.00	1.94	1.91
Impact of Scenario 2 (%)	0.00	-9.94	-10.58	-11.41	-11.02	-10.45	-9.82	-9.52	-9.29	-9.08	-8.64
Impact of Scenario 3 (%)	0.00	-9.61	-10.24	-11.09	-10.71	-10.17	-9.55	-9.26	-9.04	-8.84	-8.40
Ending Stocks											
Baseline	398	376	415	459	496	528	555	565	574	583	589
Scenario 1	398	415	459	503	537	567	591	600	609	616	621
Scenario 2	398	254	251	276	310	348	383	400	413	425	437
Scenario 3	398	259	257	281	316	353	388	404	418	430	442
Impact of Scenario 1 (%)	0.00	10.26	10.81	9.49	8.33	7.34	6.57	6.19	5.93	5.69	5.51
Impact of Scenario 2 (%)	0.00	-32.45	-39.36	-39.94	-37.42	-34.08	-30.93	-29.35	-28.11	-27.09	-25.73
Impact of Scenario 3 (%)	0.00	-31.23	-38.03	-38.73	-36.34	-33.12	-30.06	-28.51	-27.31	-26.31	-24.98
Net Trade											
Baseline	-200	327	450	476	527	602	682	794	901	1,001	1,107
Scenario 1	-200	197	263	311	374	457	545	660	769	869	977
Scenario 2	-200	744	1,004	1,031	1,078	1,122	968	1,062	1,160	1,248	1,332
Scenario 3	-200	1,154	1,552	1,582	1,631	1,675	1,498	1,618	1,750	1,872	1,991
Impact of Scenario 1 (%)	0.00	-39.72	-41.47	-34.69	-29.09	-24.09	-20.15	-16.90	-14.71	-13.14	-11.76
Impact of Scenario 2 (%)	0.00	127.45	123.09	116.31	104.55	86.34	41.89	33.80	28.62	24.67	20.32
Impact of Scenario 3 (%)	0.00	252.74	245.09	232.00	209.63	178.32	119.47	103.85	94.13	87.08	79.90

Table B.2. Impacts of EU Enlargement on Czech Republic Corn

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested						(Thousand Hectares)					
Baseline	80	78	71	69	69	68	72	74	74	73	73
Scenario 1	80	78	73	71	70	70	73	75	75	75	74
Scenario 2	80	78	74	73	72	72	75	76	76	76	76
Scenario 3	80	78	74	73	73	72	75	77	77	77	77
Impact of Scenario 1 (%)	0.00	0.00	1.94	2.15	2.16	2.08	1.89	1.77	1.74	1.75	1.72
Impact of Scenario 2 (%)	0.00	0.00	3.75	4.50	4.94	4.97	3.56	3.12	3.27	3.41	3.42
Impact of Scenario 3 (%)	0.00	0.00	4.28	5.25	5.83	5.96	4.52	4.10	4.31	4.52	4.58
Yield						(Metric Tons per Hectare)					
Baseline	5.44	7.00	7.02	7.04	7.07	7.10	7.13	7.17	7.20	7.24	7.28
Scenario 1	5.44	7.01	7.03	7.05	7.08	7.11	7.14	7.18	7.22	7.26	7.30
Scenario 2	5.44	7.06	7.08	7.11	7.14	7.16	7.19	7.23	7.27	7.31	7.35
Scenario 3	5.44	7.78	7.82	7.89	7.95	8.02	8.08	8.18	8.27	8.36	8.46
Impact of Scenario 1 (%)	0.00	0.25	0.20	0.19	0.18	0.18	0.17	0.17	0.17	0.17	0.17
Impact of Scenario 2 (%)	0.00	0.95	0.95	0.98	0.95	0.92	0.89	0.88	0.88	0.86	0.84
Impact of Scenario 3 (%)	0.00	11.22	11.52	12.07	12.51	12.94	13.41	14.10	14.79	15.43	16.10
Production						(Thousand Metric Tons)					
Baseline	435	543	500	489	485	485	513	530	530	531	533
Scenario 1	435	545	511	500	496	496	524	541	540	541	543
Scenario 2	435	549	524	516	514	513	536	552	552	554	556
Scenario 3	435	604	582	576	577	580	609	630	634	641	647
Impact of Scenario 1 (%)	0.00	0.25	2.14	2.35	2.35	2.25	2.06	1.95	1.92	1.92	1.90
Impact of Scenario 2 (%)	0.00	0.95	4.73	5.52	5.94	5.94	4.49	4.03	4.18	4.30	4.29
Impact of Scenario 3 (%)	0.00	11.22	16.29	17.95	19.07	19.67	18.54	18.78	19.73	20.64	21.41
Domestic Supply											
Baseline	572	575	521	509	506	507	536	554	554	555	558
Scenario 1	572	577	531	520	517	517	546	564	563	565	567
Scenario 2	572	581	541	532	531	531	555	571	572	574	576
Scenario 3	572	636	599	593	594	598	627	650	654	661	668
Impact of Scenario 1 (%)	0.00	0.24	1.87	2.07	2.07	1.99	1.82	1.72	1.69	1.69	1.67
Impact of Scenario 2 (%)	0.00	0.90	3.83	4.47	4.81	4.81	3.50	3.11	3.26	3.37	3.38
Impact of Scenario 3 (%)	0.00	10.59	14.93	16.40	17.39	17.94	16.95	17.23	18.14	19.01	19.75
Feed Use											
Baseline	370	407	432	463	488	511	531	552	569	586	602
Scenario 1	370	403	424	453	476	498	517	537	553	569	584
Scenario 2	370	401	420	447	468	488	506	524	539	554	568
Scenario 3	370	401	420	447	468	488	506	524	539	554	568
Impact of Scenario 1 (%)	0.00	-1.09	-1.68	-2.09	-2.36	-2.53	-2.66	-2.74	-2.81	-2.85	-2.90
Impact of Scenario 2 (%)	0.00	-1.59	-2.66	-3.47	-4.04	-4.46	-4.78	-5.03	-5.26	-5.42	-5.56
Impact of Scenario 3 (%)	0.00	-1.60	-2.67	-3.49	-4.07	-4.49	-4.80	-5.06	-5.29	-5.45	-5.59
Consumption											
Baseline	450	511	530	562	586	610	630	651	669	686	702
Scenario 1	450	504	521	551	573	595	614	634	651	668	683
Scenario 2	450	502	518	546	566	586	604	622	638	653	668
Scenario 3	450	502	518	545	566	586	604	622	638	653	668
Impact of Scenario 1 (%)	0.00	-1.42	-1.74	-2.07	-2.27	-2.41	-2.50	-2.56	-2.63	-2.66	-2.69
Impact of Scenario 2 (%)	0.00	-1.75	-2.16	-2.99	-3.39	-3.82	-4.11	-4.37	-4.62	-4.77	-4.91
Impact of Scenario 3 (%)	0.00	-1.81	-2.21	-3.05	-3.45	-3.87	-4.16	-4.42	-4.67	-4.82	-4.96
Domestic Use											
Baseline	482	532	551	584	609	633	654	675	693	710	727
Scenario 1	482	524	541	571	594	617	637	657	675	691	707
Scenario 2	482	519	535	563	584	605	624	642	658	674	689
Scenario 3	482	519	535	562	584	605	623	642	658	673	688
Impact of Scenario 1 (%)	0.00	-1.55	-1.84	-2.14	-2.32	-2.45	-2.53	-2.59	-2.65	-2.68	-2.72
Impact of Scenario 2 (%)	0.00	-2.38	-2.85	-3.65	-3.99	-4.35	-4.60	-4.82	-5.05	-5.18	-5.29
Impact of Scenario 3 (%)	0.00	-2.42	-2.89	-3.69	-4.03	-4.40	-4.64	-4.86	-5.09	-5.22	-5.33
Ending Stocks											
Baseline	32	21	21	22	22	23	24	24	24	25	25
Scenario 1	32	20	20	21	21	22	23	23	23	24	24
Scenario 2	32	18	17	17	18	19	20	20	20	20	21
Scenario 3	32	18	17	17	18	19	20	20	20	21	21
Impact of Scenario 1 (%)	0.00	-4.62	-4.35	-4.07	-3.76	-3.52	-3.38	-3.29	-3.33	-3.23	-3.31
Impact of Scenario 2 (%)	0.00	-17.38	-20.32	-20.68	-19.68	-18.50	-17.48	-17.07	-16.91	-16.47	-16.16
Impact of Scenario 3 (%)	0.00	-17.18	-20.09	-20.46	-19.49	-18.32	-17.31	-16.91	-16.76	-16.32	-16.01
Net Trade											
Baseline	90	43	-29	-75	-102	-126	-117	-121	-139	-155	-169
Scenario 1	90	53	-10	-52	-78	-100	-91	-94	-111	-127	-140
Scenario 2	90	61	6	-31	-53	-74	-68	-71	-86	-100	-112
Scenario 3	90	117	64	30	10	-7	4	8	-3	-13	-21
Impact of Scenario 1 (%)	0.00	22.15	-67.57	-30.94	-24.12	-20.36	-22.45	-22.36	-19.94	-18.31	-17.16
Impact of Scenario 2 (%)	0.00	41.08	-121.31	-59.05	-47.64	-41.33	-41.63	-41.22	-38.09	-35.76	-33.81
Impact of Scenario 3 (%)	0.00	170.41	-318.87	-140.82	-110.25	-94.55	-103.39	-106.25	-97.52	-91.92	-87.85

Table B.3. Impacts of EU Enlargement on Czech Republic Barley

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested					(Thousand Hectares)						
Baseline	550	524	612	614	612	621	618	612	610	610	609
Scenario 1	550	524	598	601	600	610	608	602	600	600	599
Scenario 2	550	524	631	655	657	671	636	622	620	617	614
Scenario 3	550	524	643	669	671	684	648	632	630	627	624
Impact of Scenario 1 (%)	0.00	0.00	-2.34	-2.16	-2.07	-1.86	-1.76	-1.66	-1.58	-1.55	-1.51
Impact of Scenario 2 (%)	0.00	0.00	3.00	6.63	7.27	8.00	2.90	1.67	1.60	1.15	0.82
Impact of Scenario 3 (%)	0.00	0.00	4.98	8.95	9.59	10.15	4.78	3.38	3.29	2.85	2.53
Yield					(Metric Tons per Hectare)						
Baseline	3.76	3.86	3.86	3.88	3.89	3.91	3.92	3.95	3.98	4.00	4.03
Scenario 1	3.76	3.84	3.84	3.86	3.88	3.89	3.91	3.94	3.96	3.99	4.01
Scenario 2	3.76	3.89	3.92	3.94	3.95	3.96	3.98	4.00	4.02	4.05	4.07
Scenario 3	3.76	4.27	4.29	4.30	4.32	4.32	4.34	4.38	4.41	4.45	4.49
Impact of Scenario 1 (%)	0.00	-0.57	-0.49	-0.46	-0.41	-0.38	-0.35	-0.33	-0.32	-0.31	-0.28
Impact of Scenario 2 (%)	0.00	0.78	1.56	1.45	1.58	1.45	1.36	1.28	1.17	1.11	1.09
Impact of Scenario 3 (%)	0.00	10.53	11.03	10.87	10.90	10.63	10.49	10.77	10.96	11.21	11.51
Production					(Thousand Metric Tons)						
Baseline	2,070	2,023	2,363	2,382	2,383	2,428	2,427	2,417	2,425	2,439	2,450
Scenario 1	2,070	2,012	2,297	2,320	2,324	2,373	2,376	2,369	2,379	2,394	2,406
Scenario 2	2,070	2,039	2,472	2,577	2,596	2,660	2,531	2,489	2,493	2,494	2,497
Scenario 3	2,070	2,236	2,754	2,878	2,896	2,959	2,810	2,768	2,779	2,790	2,801
Impact of Scenario 1 (%)	0.00	-0.57	-2.81	-2.61	-2.47	-2.24	-2.10	-1.99	-1.90	-1.85	-1.78
Impact of Scenario 2 (%)	0.00	0.78	4.61	8.18	8.97	9.57	4.31	2.97	2.79	2.28	1.91
Impact of Scenario 3 (%)	0.00	10.53	16.56	20.80	21.53	21.86	15.77	14.50	14.61	14.38	14.33
Domestic Supply											
Baseline	2,250	2,098	2,423	2,441	2,443	2,492	2,494	2,487	2,497	2,512	2,524
Scenario 1	2,250	2,087	2,358	2,382	2,387	2,440	2,446	2,442	2,453	2,469	2,482
Scenario 2	2,250	2,114	2,529	2,629	2,649	2,715	2,590	2,550	2,556	2,560	2,563
Scenario 3	2,250	2,311	2,812	2,931	2,949	3,014	2,868	2,830	2,843	2,855	2,868
Impact of Scenario 1 (%)	0.00	-0.55	-2.66	-2.44	-2.30	-2.08	-1.95	-1.84	-1.75	-1.71	-1.65
Impact of Scenario 2 (%)	0.00	0.76	4.38	7.70	8.41	8.95	3.82	2.53	2.37	1.89	1.56
Impact of Scenario 3 (%)	0.00	10.16	16.05	20.04	20.69	20.95	15.00	13.76	13.87	13.66	13.63
Feed Use											
Baseline	1,300	1,029	907	857	846	851	865	878	885	894	907
Scenario 1	1,300	1,062	952	909	899	904	916	927	933	941	953
Scenario 2	1,300	1,058	917	865	844	848	863	878	891	905	921
Scenario 3	1,300	1,061	923	872	851	855	870	884	897	912	927
Impact of Scenario 1 (%)	0.00	3.19	4.96	6.02	6.24	6.16	5.89	5.64	5.48	5.30	5.08
Impact of Scenario 2 (%)	0.00	2.76	1.12	0.91	-0.15	-0.35	-0.29	0.02	0.70	1.23	1.48
Impact of Scenario 3 (%)	0.00	3.13	1.73	1.68	0.66	0.46	0.49	0.78	1.44	1.95	2.18
Consumption											
Baseline	1,900	1,544	1,461	1,395	1,389	1,390	1,402	1,406	1,406	1,408	1,414
Scenario 1	1,900	1,587	1,511	1,453	1,447	1,448	1,458	1,460	1,459	1,460	1,464
Scenario 2	1,900	1,563	1,453	1,389	1,371	1,373	1,386	1,393	1,401	1,408	1,416
Scenario 3	1,900	1,569	1,459	1,397	1,379	1,381	1,393	1,400	1,408	1,415	1,423
Impact of Scenario 1 (%)	0.00	2.74	3.43	4.13	4.16	4.13	3.96	3.83	3.75	3.65	3.52
Impact of Scenario 2 (%)	0.00	1.24	-0.56	-0.42	-1.34	-1.25	-1.18	-0.92	-0.39	-0.02	0.16
Impact of Scenario 3 (%)	0.00	1.59	-0.10	0.13	-0.77	-0.68	-0.63	-0.38	0.14	0.50	0.67
Domestic Use											
Baseline	1,975	1,604	1,520	1,456	1,453	1,458	1,473	1,478	1,479	1,482	1,489
Scenario 1	1,975	1,648	1,573	1,516	1,514	1,518	1,531	1,534	1,534	1,536	1,541
Scenario 2	1,975	1,620	1,505	1,442	1,426	1,431	1,447	1,456	1,466	1,474	1,484
Scenario 3	1,975	1,626	1,512	1,450	1,434	1,440	1,456	1,465	1,474	1,482	1,492
Impact of Scenario 1 (%)	0.00	2.77	3.46	4.15	4.16	4.11	3.93	3.79	3.71	3.61	3.47
Impact of Scenario 2 (%)	0.00	1.02	-0.99	-0.97	-1.91	-1.82	-1.72	-1.45	-0.90	-0.52	-0.34
Impact of Scenario 3 (%)	0.00	1.38	-0.52	-0.40	-1.33	-1.24	-1.16	-0.90	-0.37	0.00	0.18
Ending Stocks											
Baseline	75	60	59	61	64	67	70	72	73	74	75
Scenario 1	75	62	62	63	67	70	73	74	75	76	77
Scenario 2	75	57	52	53	55	58	62	64	65	67	68
Scenario 3	75	57	53	53	55	59	62	64	66	67	68
Impact of Scenario 1 (%)	0.00	3.45	4.43	4.57	4.15	3.75	3.34	3.08	2.91	2.77	2.56
Impact of Scenario 2 (%)	0.00	-4.78	-11.60	-13.47	-14.38	-13.62	-12.57	-11.74	-10.82	-10.10	-9.64
Impact of Scenario 3 (%)	0.00	-4.12	-10.70	-12.52	-13.48	-12.79	-11.81	-11.02	-10.12	-9.43	-8.99
Net Trade											
Baseline	275	494	903	986	990	1,034	1,022	1,010	1,018	1,030	1,035
Scenario 1	275	438	786	866	873	923	915	908	919	933	942
Scenario 2	275	494	1,024	1,188	1,223	1,284	1,142	1,094	1,091	1,085	1,079
Scenario 3	275	685	1,299	1,481	1,515	1,574	1,413	1,365	1,370	1,373	1,376
Impact of Scenario 1 (%)	0.00	-11.30	-12.97	-12.17	-11.78	-10.80	-10.41	-10.07	-9.68	-9.37	-9.02
Impact of Scenario 2 (%)	0.00	-0.10	13.42	20.50	23.57	24.13	11.81	8.36	7.12	5.37	4.29
Impact of Scenario 3 (%)	0.00	38.64	43.94	50.22	53.02	52.21	38.30	35.21	34.54	33.32	32.98

Table. B.4. Impacts of EU Enlargement on Hungary Wheat

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested					(Thousand Hectares)						
Baseline	1,200	1,093	1,084	1,078	1,067	1,063	1,062	1,058	1,057	1,055	1,053
Scenario 1	1,200	1,093	1,062	1,052	1,042	1,039	1,038	1,035	1,034	1,033	1,032
Scenario 2	1,200	1,093	1,144	1,149	1,147	1,147	1,092	1,076	1,074	1,071	1,068
Scenario 3	1,200	1,093	1,170	1,180	1,179	1,180	1,125	1,109	1,107	1,104	1,102
Impact of Scenario 1 (%)	0.00	0.00	-2.09	-2.41	-2.33	-2.29	-2.27	-2.19	-2.14	-2.11	-2.07
Impact of Scenario 2 (%)	0.00	0.00	5.53	6.65	7.58	7.84	2.82	1.76	1.67	1.52	1.36
Impact of Scenario 3 (%)	0.00	0.00	7.88	9.49	10.57	10.95	5.91	4.80	4.76	4.67	4.57
Yield					(Metric Tons per Hectare)						
Baseline	2.42	3.47	3.49	3.52	3.55	3.59	3.62	3.65	3.69	3.72	3.76
Scenario 1	2.42	3.43	3.46	3.49	3.53	3.56	3.59	3.63	3.66	3.70	3.73
Scenario 2	2.42	3.52	3.55	3.59	3.62	3.65	3.68	3.71	3.74	3.78	3.81
Scenario 3	2.42	4.29	4.36	4.43	4.50	4.58	4.64	4.71	4.79	4.86	4.93
Impact of Scenario 1 (%)	0.00	-0.97	-0.87	-0.79	-0.76	-0.74	-0.69	-0.66	-0.64	-0.61	-0.59
Impact of Scenario 2 (%)	0.00	1.64	1.74	1.86	1.86	1.84	1.71	1.63	1.57	1.51	1.40
Impact of Scenario 3 (%)	0.00	23.87	24.71	25.72	26.68	27.66	28.24	29.07	29.88	30.67	31.38
Production					(Thousand Metric Tons)						
Baseline	2,900	3,788	3,786	3,794	3,791	3,816	3,842	3,863	3,896	3,926	3,956
Scenario 1	2,900	3,751	3,675	3,673	3,675	3,701	3,729	3,754	3,788	3,819	3,851
Scenario 2	2,900	3,850	4,065	4,122	4,154	4,191	4,018	3,996	4,023	4,045	4,066
Scenario 3	2,900	4,692	5,094	5,222	5,310	5,405	5,218	5,226	5,301	5,369	5,434
Impact of Scenario 1 (%)	0.00	-0.97	-2.93	-3.18	-3.07	-3.01	-2.94	-2.83	-2.76	-2.71	-2.64
Impact of Scenario 2 (%)	0.00	1.64	7.36	8.63	9.58	9.82	4.58	3.43	3.27	3.05	2.79
Impact of Scenario 3 (%)	0.00	23.87	34.55	37.65	40.08	41.64	35.82	35.26	36.07	36.77	37.38
Domestic Supply											
Baseline	3,629	4,167	4,163	4,192	4,206	4,239	4,269	4,302	4,339	4,373	4,409
Scenario 1	3,629	4,130	4,087	4,106	4,123	4,156	4,187	4,222	4,259	4,295	4,331
Scenario 2	3,629	4,229	4,382	4,449	4,493	4,537	4,368	4,362	4,396	4,425	4,454
Scenario 3	3,629	5,071	5,413	5,553	5,652	5,754	5,570	5,594	5,676	5,751	5,824
Impact of Scenario 1 (%)	0.00	-0.88	-1.82	-2.04	-1.98	-1.97	-1.92	-1.86	-1.83	-1.80	-1.77
Impact of Scenario 2 (%)	0.00	1.49	5.26	6.15	6.83	7.02	2.32	1.39	1.32	1.19	1.01
Impact of Scenario 3 (%)	0.00	21.70	30.04	32.47	34.37	35.72	30.48	30.02	30.82	31.50	32.09
Feed Use											
Baseline	900	861	882	922	954	983	997	1,011	1,018	1,027	1,034
Scenario 1	900	911	936	975	1,007	1,036	1,047	1,061	1,068	1,075	1,081
Scenario 2	900	802	804	832	859	886	904	922	933	944	957
Scenario 3	900	805	808	836	863	889	908	925	936	947	960
Impact of Scenario 1 (%)	0.00	5.80	6.12	5.75	5.52	5.41	5.10	4.94	4.82	4.66	4.56
Impact of Scenario 2 (%)	0.00	-6.86	-8.82	-9.77	-9.97	-9.91	-9.25	-8.81	-8.40	-8.09	-7.51
Impact of Scenario 3 (%)	0.00	-6.51	-8.43	-9.39	-9.59	-9.55	-8.91	-8.48	-8.07	-7.78	-7.20
Consumption											
Baseline	2,800	2,962	3,008	3,073	3,110	3,145	3,171	3,191	3,205	3,220	3,231
Scenario 1	2,800	3,055	3,104	3,164	3,200	3,234	3,256	3,273	3,285	3,298	3,308
Scenario 2	2,800	2,810	2,837	2,878	2,912	2,944	2,981	3,007	3,027	3,047	3,070
Scenario 3	2,800	2,816	2,843	2,884	2,918	2,950	2,987	3,013	3,032	3,052	3,075
Impact of Scenario 1 (%)	0.00	3.14	3.19	2.96	2.88	2.83	2.66	2.58	2.51	2.43	2.38
Impact of Scenario 2 (%)	0.00	-5.12	-5.70	-6.35	-6.38	-6.40	-5.99	-5.75	-5.55	-5.37	-4.99
Impact of Scenario 3 (%)	0.00	-4.94	-5.51	-6.15	-6.19	-6.22	-5.81	-5.58	-5.39	-5.21	-4.84
Domestic Use											
Baseline	3,179	3,339	3,406	3,488	3,534	3,572	3,610	3,634	3,653	3,673	3,689
Scenario 1	3,179	3,467	3,537	3,612	3,655	3,692	3,723	3,745	3,761	3,778	3,792
Scenario 2	3,179	3,127	3,165	3,217	3,258	3,294	3,347	3,380	3,407	3,434	3,466
Scenario 3	3,179	3,135	3,173	3,225	3,266	3,302	3,355	3,388	3,414	3,442	3,472
Impact of Scenario 1 (%)	0.00	3.84	3.85	3.55	3.43	3.36	3.15	3.05	2.96	2.85	2.79
Impact of Scenario 2 (%)	0.00	-6.34	-7.09	-7.77	-7.79	-7.79	-7.27	-6.98	-6.73	-6.50	-6.05
Impact of Scenario 3 (%)	0.00	-6.11	-6.85	-7.53	-7.57	-7.57	-7.06	-6.77	-6.53	-6.31	-5.87
Ending Stocks											
Baseline	379	377	398	415	423	427	439	443	448	453	457
Scenario 1	379	412	433	448	455	458	468	471	475	480	483
Scenario 2	379	317	328	339	346	350	366	373	380	387	396
Scenario 3	379	319	330	341	348	352	368	375	382	389	397
Impact of Scenario 1 (%)	0.00	9.34	8.87	7.92	7.49	7.27	6.65	6.37	6.13	5.87	5.65
Impact of Scenario 2 (%)	0.00	-15.86	-17.57	-18.27	-18.18	-18.00	-16.55	-15.78	-15.12	-14.49	-13.54
Impact of Scenario 3 (%)	0.00	-15.28	-17.00	-17.73	-17.67	-17.50	-16.09	-15.34	-14.69	-14.08	-13.15
Net Trade											
Baseline	450	828	757	704	673	667	659	668	686	700	720
Scenario 1	450	663	550	494	468	464	463	477	498	517	539
Scenario 2	450	1,102	1,217	1,232	1,235	1,243	1,020	981	989	991	988
Scenario 3	450	1,936	2,241	2,327	2,386	2,452	2,215	2,206	2,261	2,310	2,351
Impact of Scenario 1 (%)	0.00	-19.91	-27.35	-29.74	-30.43	-30.48	-29.67	-28.57	-27.32	-26.23	-25.10
Impact of Scenario 2 (%)	0.00	33.06	60.84	75.09	83.66	86.32	54.87	46.88	44.18	41.52	37.21
Impact of Scenario 3 (%)	0.00	133.79	196.01	230.68	254.73	267.47	236.19	230.15	229.70	229.83	226.56

Table B.5. Impacts of EU Enlargement on Hungary Corn

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested					(Thousand Hectares)						
Baseline	1,100	1,075	985	955	994	1,005	1,008	1,006	1,004	1,002	1,000
Scenario 1	1,100	1,075	993	963	1,002	1,013	1,016	1,014	1,012	1,010	1,008
Scenario 2	1,100	1,075	1,018	996	1,038	1,051	1,047	1,044	1,044	1,043	1,041
Scenario 3	1,100	1,075	1,035	1,018	1,063	1,077	1,073	1,071	1,071	1,070	1,069
Impact of Scenario 1 (%)	0.00	0.00	0.76	0.81	0.77	0.75	0.77	0.78	0.77	0.80	0.79
Impact of Scenario 2 (%)	0.00	0.00	3.30	4.29	4.44	4.59	3.90	3.83	4.00	4.09	4.03
Impact of Scenario 3 (%)	0.00	0.00	5.04	6.62	6.90	7.17	6.49	6.43	6.66	6.83	6.83
Yield					(Metric Tons per Hectare)						
Baseline	4.18	5.16	5.20	5.26	5.31	5.36	5.41	5.47	5.52	5.58	5.63
Scenario 1	4.18	5.15	5.19	5.25	5.30	5.36	5.41	5.46	5.52	5.57	5.63
Scenario 2	4.18	5.22	5.27	5.33	5.38	5.44	5.48	5.54	5.59	5.64	5.70
Scenario 3	4.18	6.45	6.57	6.70	6.84	6.97	7.09	7.23	7.36	7.49	7.63
Impact of Scenario 1 (%)	0.00	-0.20	-0.22	-0.19	-0.18	-0.17	-0.14	-0.14	-0.12	-0.12	-0.10
Impact of Scenario 2 (%)	0.00	1.35	1.33	1.37	1.36	1.36	1.30	1.26	1.25	1.20	1.16
Impact of Scenario 3 (%)	0.00	25.10	26.22	27.49	28.73	29.99	31.02	32.15	33.29	34.35	35.40
Production					(Thousand Metric Tons)						
Baseline	4,600	5,540	5,128	5,020	5,279	5,393	5,458	5,501	5,544	5,589	5,635
Scenario 1	4,600	5,529	5,156	5,050	5,310	5,425	5,492	5,536	5,581	5,627	5,674
Scenario 2	4,600	5,614	5,368	5,307	5,589	5,718	5,745	5,784	5,838	5,887	5,930
Scenario 3	4,600	6,930	6,799	6,823	7,265	7,513	7,615	7,737	7,882	8,021	8,151
Impact of Scenario 1 (%)	0.00	-0.20	0.54	0.61	0.59	0.58	0.62	0.64	0.65	0.68	0.69
Impact of Scenario 2 (%)	0.00	1.35	4.67	5.72	5.87	6.01	5.25	5.14	5.30	5.34	5.24
Impact of Scenario 3 (%)	0.00	25.10	32.58	35.93	37.62	39.30	39.52	40.65	42.17	43.52	44.65
Domestic Supply											
Baseline	4,751	5,691	5,328	5,247	5,523	5,646	5,716	5,767	5,817	5,866	5,917
Scenario 1	4,751	5,680	5,361	5,286	5,562	5,685	5,757	5,810	5,859	5,910	5,961
Scenario 2	4,751	5,765	5,528	5,482	5,775	5,910	5,941	5,991	6,052	6,106	6,155
Scenario 3	4,751	7,081	6,960	6,999	7,451	7,706	7,812	7,945	8,096	8,241	8,377
Impact of Scenario 1 (%)	0.00	-0.19	0.63	0.75	0.71	0.70	0.73	0.73	0.73	0.75	0.75
Impact of Scenario 2 (%)	0.00	1.31	3.75	4.48	4.56	4.69	3.95	3.87	4.04	4.09	4.03
Impact of Scenario 3 (%)	0.00	24.44	30.62	33.39	34.92	36.50	36.68	37.75	39.19	40.49	41.57
Feed Use											
Baseline	3,500	3,318	3,255	3,297	3,355	3,435	3,460	3,509	3,533	3,557	3,583
Scenario 1	3,500	3,323	3,265	3,307	3,365	3,444	3,467	3,515	3,537	3,561	3,586
Scenario 2	3,500	3,190	3,096	3,119	3,170	3,241	3,268	3,317	3,340	3,367	3,396
Scenario 3	3,500	3,190	3,097	3,120	3,170	3,241	3,269	3,318	3,341	3,368	3,397
Impact of Scenario 1 (%)	0.00	0.14	0.32	0.31	0.30	0.26	0.20	0.17	0.12	0.11	0.06
Impact of Scenario 2 (%)	0.00	-3.87	-4.88	-5.39	-5.53	-5.66	-5.54	-5.46	-5.45	-5.33	-5.22
Impact of Scenario 3 (%)	0.00	-3.86	-4.86	-5.37	-5.51	-5.64	-5.52	-5.45	-5.44	-5.31	-5.20
Consumption											
Baseline	4,100	3,944	3,893	3,937	3,990	4,060	4,073	4,108	4,117	4,122	4,130
Scenario 1	4,100	3,939	3,893	3,936	3,990	4,059	4,070	4,104	4,111	4,116	4,123
Scenario 2	4,100	3,805	3,721	3,747	3,792	3,853	3,868	3,903	3,909	3,918	3,928
Scenario 3	4,100	3,805	3,721	3,746	3,792	3,853	3,868	3,903	3,909	3,918	3,928
Impact of Scenario 1 (%)	0.00	-0.13	-0.01	-0.01	-0.01	-0.04	-0.09	-0.10	-0.14	-0.14	-0.19
Impact of Scenario 2 (%)	0.00	-3.54	-4.41	-4.83	-4.96	-5.10	-5.04	-5.00	-5.04	-4.95	-4.89
Impact of Scenario 3 (%)	0.00	-3.54	-4.41	-4.83	-4.96	-5.10	-5.04	-5.00	-5.04	-4.95	-4.89
Domestic Use											
Baseline	4,251	4,144	4,120	4,180	4,243	4,318	4,340	4,380	4,394	4,404	4,417
Scenario 1	4,251	4,145	4,128	4,188	4,250	4,324	4,343	4,383	4,394	4,404	4,414
Scenario 2	4,251	3,965	3,896	3,932	3,985	4,049	4,075	4,116	4,128	4,143	4,159
Scenario 3	4,251	3,965	3,897	3,933	3,985	4,050	4,075	4,117	4,129	4,144	4,160
Impact of Scenario 1 (%)	0.00	0.01	0.20	0.19	0.18	0.14	0.08	0.06	0.00	-0.01	-0.06
Impact of Scenario 2 (%)	0.00	-4.33	-5.43	-5.93	-6.08	-6.21	-6.10	-6.03	-6.04	-5.92	-5.83
Impact of Scenario 3 (%)	0.00	-4.32	-5.42	-5.92	-6.07	-6.20	-6.09	-6.02	-6.03	-5.91	-5.82
Ending Stocks											
Baseline	151	200	227	244	252	257	266	272	277	282	286
Scenario 1	151	206	235	252	261	265	273	279	283	287	291
Scenario 2	151	160	175	186	193	196	207	214	219	225	231
Scenario 3	151	161	176	186	193	197	207	214	220	225	231
Impact of Scenario 1 (%)	0.00	2.90	3.66	3.44	3.22	3.00	2.59	2.38	2.13	2.00	1.76
Impact of Scenario 2 (%)	0.00	-19.84	-22.95	-23.74	-23.70	-23.68	-22.41	-21.54	-20.97	-20.14	-19.36
Impact of Scenario 3 (%)	0.00	-19.62	-22.71	-23.50	-23.47	-23.46	-22.20	-21.35	-20.78	-19.96	-19.19
Net Trade											
Baseline	500	1,546	1,208	1,066	1,280	1,328	1,376	1,387	1,423	1,462	1,500
Scenario 1	500	1,535	1,233	1,097	1,312	1,361	1,414	1,427	1,466	1,506	1,548
Scenario 2	500	1,800	1,632	1,549	1,790	1,861	1,867	1,875	1,924	1,963	1,996
Scenario 3	500	3,116	3,063	3,066	3,466	3,656	3,737	3,828	3,968	4,097	4,217
Impact of Scenario 1 (%)	0.00	-0.74	2.10	2.91	2.47	2.52	2.78	2.85	3.00	3.04	3.15
Impact of Scenario 2 (%)	0.00	16.43	35.04	45.30	39.82	40.11	35.65	35.14	35.18	34.26	33.06
Impact of Scenario 3 (%)	0.00	101.50	153.51	187.53	170.77	175.31	171.57	175.94	178.83	180.25	181.10

Table B.6. Impacts of EU Enlargement on Hungary Barley

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested					(Thousand Hectares)						
Baseline	300	285	317	314	314	311	311	308	307	306	305
Scenario 1	300	285	309	307	306	304	304	301	301	300	299
Scenario 2	300	285	332	337	337	337	321	316	315	313	311
Scenario 3	300	285	346	353	353	352	336	330	330	328	326
Impact of Scenario 1 (%)	0.00	0.00	-2.63	-2.43	-2.39	-2.26	-2.24	-2.12	-2.05	-2.01	-1.97
Impact of Scenario 2 (%)	0.00	0.00	4.67	7.33	7.47	8.19	3.27	2.55	2.72	2.36	2.02
Impact of Scenario 3 (%)	0.00	0.00	8.99	12.29	12.50	13.28	8.18	7.28	7.43	7.06	6.70
Yield					(Metric Tons per Hectare)						
Baseline	2.77	2.94	2.95	2.97	2.98	3.00	3.02	3.04	3.06	3.08	3.10
Scenario 1	2.77	2.90	2.91	2.93	2.95	2.97	2.99	3.01	3.03	3.05	3.07
Scenario 2	2.77	2.98	3.00	3.01	3.04	3.05	3.06	3.08	3.10	3.12	3.14
Scenario 3	2.77	3.66	3.69	3.73	3.78	3.82	3.85	3.89	3.94	3.98	4.02
Impact of Scenario 1 (%)	0.00	-1.27	-1.11	-1.06	-1.00	-0.98	-0.91	-0.88	-0.85	-0.82	-0.77
Impact of Scenario 2 (%)	0.00	1.18	1.75	1.65	1.78	1.71	1.59	1.50	1.39	1.31	1.27
Impact of Scenario 3 (%)	0.00	24.27	25.34	25.83	26.67	27.34	27.67	28.25	28.77	29.32	29.88
Production					(Thousand Metric Tons)						
Baseline	830	839	934	932	935	934	938	935	938	942	945
Scenario 1	830	829	900	900	904	904	908	907	911	916	919
Scenario 2	830	849	995	1,017	1,023	1,028	984	973	977	977	976
Scenario 3	830	1,043	1,276	1,317	1,332	1,348	1,295	1,286	1,297	1,304	1,310
Impact of Scenario 1 (%)	0.00	-1.27	-3.70	-3.46	-3.36	-3.22	-3.13	-2.98	-2.88	-2.82	-2.73
Impact of Scenario 2 (%)	0.00	1.18	6.50	9.11	9.38	10.04	4.91	4.09	4.14	3.70	3.32
Impact of Scenario 3 (%)	0.00	24.27	36.61	41.29	42.50	44.25	38.12	37.59	38.34	38.44	38.59
Domestic Supply											
Baseline	912	901	968	967	973	975	980	982	987	993	998
Scenario 1	912	891	943	946	953	956	962	964	970	976	981
Scenario 2	912	911	1,020	1,036	1,043	1,051	1,008	1,002	1,009	1,012	1,014
Scenario 3	912	1,105	1,302	1,337	1,354	1,371	1,320	1,316	1,330	1,340	1,348
Impact of Scenario 1 (%)	0.00	-1.19	-2.59	-2.18	-2.07	-1.96	-1.89	-1.79	-1.75	-1.71	-1.65
Impact of Scenario 2 (%)	0.00	1.09	5.37	7.15	7.25	7.70	2.80	2.08	2.22	1.91	1.63
Impact of Scenario 3 (%)	0.00	22.60	34.49	38.25	39.18	40.56	34.65	34.06	34.79	34.95	35.11
Feed Use											
Baseline	550	283	192	159	154	156	169	179	187	196	207
Scenario 1	550	318	239	211	209	212	223	233	239	247	257
Scenario 2	550	266	149	106	92	90	104	117	130	143	157
Scenario 3	550	268	153	110	96	94	109	122	134	147	160
Impact of Scenario 1 (%)	0.00	12.42	24.40	33.19	35.27	35.91	32.28	29.79	28.04	26.15	23.96
Impact of Scenario 2 (%)	0.00	-6.03	-22.37	-33.25	-40.45	-42.31	-38.13	-34.50	-30.50	-27.17	-24.51
Impact of Scenario 3 (%)	0.00	-5.16	-20.54	-30.73	-37.70	-39.49	-35.59	-32.14	-28.29	-25.11	-22.60
Consumption											
Baseline	850	525	428	394	393	395	411	423	432	442	455
Scenario 1	850	573	490	462	461	465	479	489	497	505	516
Scenario 2	850	504	374	329	316	314	333	349	364	379	395
Scenario 3	850	507	378	334	321	320	339	354	369	384	400
Impact of Scenario 1 (%)	0.00	9.13	14.35	17.12	17.52	17.76	16.51	15.68	15.08	14.37	13.51
Impact of Scenario 2 (%)	0.00	-4.04	-12.80	-16.61	-19.59	-20.31	-18.86	-17.50	-15.70	-14.27	-13.20
Impact of Scenario 3 (%)	0.00	-3.40	-11.72	-15.31	-18.22	-18.91	-17.56	-16.25	-14.51	-13.13	-12.13
Domestic Use											
Baseline	912	559	463	432	434	437	458	472	482	494	510
Scenario 1	912	616	536	511	513	518	536	548	557	567	580
Scenario 2	912	529	393	349	338	338	362	381	399	416	435
Scenario 3	912	533	398	355	344	345	369	387	405	422	441
Impact of Scenario 1 (%)	0.00	10.28	15.67	18.25	18.39	18.49	17.05	16.13	15.47	14.72	13.79
Impact of Scenario 2 (%)	0.00	-5.37	-15.23	-19.14	-22.03	-22.59	-20.82	-19.27	-17.34	-15.79	-14.62
Impact of Scenario 3 (%)	0.00	-4.64	-14.05	-17.75	-20.59	-21.14	-19.47	-17.99	-16.11	-14.63	-13.52
Ending Stocks											
Baseline	62	34	35	38	41	43	47	49	51	53	55
Scenario 1	62	43	46	49	52	53	57	59	60	62	64
Scenario 2	62	25	19	20	22	24	29	32	35	38	41
Scenario 3	62	26	20	21	23	25	30	33	36	38	41
Impact of Scenario 1 (%)	0.00	28.10	31.79	30.10	26.68	25.26	21.78	20.01	18.82	17.60	16.11
Impact of Scenario 2 (%)	0.00	-25.95	-44.99	-45.68	-45.34	-43.71	-37.99	-34.53	-31.27	-28.54	-26.34
Impact of Scenario 3 (%)	0.00	-23.96	-42.61	-43.39	-43.26	-41.73	-36.27	-32.93	-29.78	-27.14	-25.04
Net Trade											
Baseline	0	342	505	535	539	538	522	510	505	498	488
Scenario 1	0	274	407	435	439	438	426	416	413	409	401
Scenario 2	0	382	627	687	705	712	645	621	610	596	579
Scenario 3	0	572	904	982	1,009	1,026	951	929	926	918	907
Impact of Scenario 1 (%)	0.00	-19.91	-19.37	-18.67	-18.53	-18.58	-18.49	-18.40	-18.20	-18.01	-17.79
Impact of Scenario 2 (%)	0.00	11.65	24.29	28.36	30.82	32.32	23.49	21.87	20.91	19.47	18.62
Impact of Scenario 3 (%)	0.00	67.10	79.07	83.45	87.27	90.69	82.07	82.29	83.44	84.13	85.95

Table B.7. Impacts of EU Enlargement on Other NMS Wheat

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested					(Thousand Hectares)						
Baseline	927	963	952	942	932	929	927	924	922	919	916
Scenario 1	927	963	901	893	885	883	881	879	878	876	874
Scenario 2	927	963	1,024	1,030	1,034	1,037	989	990	991	986	981
Scenario 3	927	963	1,112	1,120	1,127	1,133	1,082	1,084	1,086	1,081	1,077
Impact of Scenario 1 (%)	0.00	0.00	-5.44	-5.23	-5.04	-4.98	-4.91	-4.84	-4.75	-4.69	-4.61
Impact of Scenario 2 (%)	0.00	0.00	7.56	9.26	10.96	11.63	6.74	7.21	7.51	7.26	7.05
Impact of Scenario 3 (%)	0.00	0.00	16.72	18.83	20.93	21.91	16.74	17.36	17.80	17.66	17.58
Yield					(Metric Tons per Hectare)						
Baseline	2.82	3.37	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.53
Scenario 1	2.82	3.32	3.34	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.50
Scenario 2	2.82	3.41	3.43	3.45	3.47	3.49	3.51	3.53	3.55	3.56	3.58
Scenario 3	2.82	4.30	4.36	4.42	4.47	4.53	4.58	4.63	4.68	4.73	4.78
Impact of Scenario 1 (%)	0.00	-1.48	-1.40	-1.34	-1.30	-1.27	-1.23	-1.20	-1.16	-1.13	-1.10
Impact of Scenario 2 (%)	0.00	0.99	1.32	1.64	1.71	1.71	1.67	1.59	1.54	1.50	1.38
Impact of Scenario 3 (%)	0.00	27.58	28.86	30.16	31.08	31.91	32.65	33.32	34.01	34.72	35.30
Production					(Thousand Metric Tons)						
Baseline	2,615	3,246	3,223	3,197	3,180	3,187	3,196	3,207	3,219	3,227	3,237
Scenario 1	2,615	3,198	3,005	2,989	2,981	2,990	3,002	3,015	3,031	3,041	3,054
Scenario 2	2,615	3,278	3,512	3,550	3,589	3,619	3,469	3,492	3,515	3,513	3,513
Scenario 3	2,615	4,141	4,847	4,944	5,041	5,126	4,950	5,017	5,082	5,115	5,150
Impact of Scenario 1 (%)	0.00	-1.48	-6.76	-6.50	-6.28	-6.18	-6.09	-5.98	-5.86	-5.76	-5.66
Impact of Scenario 2 (%)	0.00	0.99	8.98	11.05	12.85	13.54	8.53	8.91	9.17	8.86	8.53
Impact of Scenario 3 (%)	0.00	27.58	50.40	54.66	58.52	60.82	54.86	56.46	57.87	58.51	59.09
Domestic Supply											
Baseline	3,786	4,203	4,231	4,267	4,318	4,377	4,427	4,474	4,517	4,555	4,595
Scenario 1	3,786	4,155	4,098	4,173	4,238	4,301	4,353	4,401	4,445	4,482	4,522
Scenario 2	3,786	4,235	4,464	4,523	4,594	4,659	4,542	4,602	4,658	4,690	4,724
Scenario 3	3,786	5,098	5,803	5,923	6,053	6,173	6,030	6,133	6,233	6,299	6,367
Impact of Scenario 1 (%)	0.00	-1.14	-3.15	-2.22	-1.84	-1.73	-1.67	-1.63	-1.61	-1.59	-1.58
Impact of Scenario 2 (%)	0.00	0.76	5.50	5.99	6.41	6.44	2.60	2.85	3.11	2.97	2.81
Impact of Scenario 3 (%)	0.00	21.30	37.15	38.81	40.20	41.03	36.21	37.08	37.97	38.30	38.57
Feed Use											
Baseline	1,465	1,587	1,728	1,857	1,922	1,987	2,038	2,071	2,099	2,134	2,168
Scenario 1	1,465	1,635	1,795	1,929	1,996	2,063	2,114	2,146	2,174	2,208	2,241
Scenario 2	1,465	1,570	1,696	1,801	1,857	1,915	1,965	1,999	2,028	2,063	2,101
Scenario 3	1,465	1,571	1,697	1,802	1,857	1,916	1,965	1,999	2,028	2,064	2,101
Impact of Scenario 1 (%)	0.00	3.01	3.82	3.89	3.87	3.80	3.72	3.63	3.54	3.46	3.40
Impact of Scenario 2 (%)	0.00	-1.06	-1.88	-2.97	-3.41	-3.61	-3.60	-3.49	-3.41	-3.35	-3.08
Impact of Scenario 3 (%)	0.00	-1.01	-1.84	-2.93	-3.37	-3.58	-3.56	-3.45	-3.38	-3.32	-3.05
Consumption											
Baseline	3,809	3,857	3,994	4,152	4,236	4,324	4,396	4,449	4,500	4,560	4,613
Scenario 1	3,809	4,020	4,180	4,339	4,423	4,510	4,581	4,631	4,680	4,736	4,789
Scenario 2	3,809	3,895	4,013	4,126	4,195	4,274	4,347	4,403	4,456	4,514	4,580
Scenario 3	3,809	3,896	4,014	4,127	4,196	4,275	4,348	4,404	4,457	4,515	4,580
Impact of Scenario 1 (%)	0.00	4.21	4.65	4.50	4.42	4.31	4.21	4.09	3.99	3.87	3.82
Impact of Scenario 2 (%)	0.00	0.98	0.46	-0.65	-0.96	-1.14	-1.12	-1.03	-0.99	-0.99	-0.73
Impact of Scenario 3 (%)	0.00	1.01	0.49	-0.62	-0.94	-1.12	-1.09	-1.01	-0.97	-0.98	-0.72
Domestic Use											
Baseline	4,766	4,866	5,064	5,290	5,425	5,555	5,663	5,747	5,828	5,917	5,996
Scenario 1	4,766	5,113	5,363	5,597	5,734	5,862	5,967	6,045	6,122	6,205	6,281
Scenario 2	4,766	4,847	4,985	5,130	5,234	5,348	5,456	5,546	5,633	5,725	5,823
Scenario 3	4,766	4,852	4,993	5,139	5,243	5,356	5,464	5,554	5,641	5,733	5,830
Impact of Scenario 1 (%)	0.00	5.09	5.90	5.81	5.69	5.53	5.36	5.19	5.03	4.86	4.75
Impact of Scenario 2 (%)	0.00	-0.39	-1.56	-3.01	-3.52	-3.72	-3.66	-3.49	-3.35	-3.25	-2.89
Impact of Scenario 3 (%)	0.00	-0.27	-1.42	-2.85	-3.36	-3.58	-3.52	-3.35	-3.22	-3.12	-2.77
Ending Stocks											
Baseline	957	1,008	1,070	1,137	1,189	1,231	1,268	1,298	1,328	1,358	1,383
Scenario 1	957	1,093	1,183	1,258	1,311	1,352	1,386	1,414	1,442	1,469	1,492
Scenario 2	957	952	972	1,005	1,039	1,074	1,109	1,143	1,177	1,211	1,244
Scenario 3	957	956	979	1,012	1,047	1,081	1,116	1,150	1,184	1,217	1,250
Impact of Scenario 1 (%)	0.00	8.42	10.58	10.59	10.22	9.79	9.35	8.94	8.54	8.17	7.87
Impact of Scenario 2 (%)	0.00	-5.64	-9.13	-11.63	-12.61	-12.79	-12.49	-11.93	-11.35	-10.83	-10.08
Impact of Scenario 3 (%)	0.00	-5.17	-8.53	-11.01	-12.00	-12.20	-11.92	-11.38	-10.83	-10.33	-9.59
Net Trade											
Baseline	-980	-663	-833	-1,023	-1,108	-1,178	-1,236	-1,273	-1,311	-1,362	-1,402
Scenario 1	-980	-958	-1,265	-1,425	-1,496	-1,561	-1,614	-1,644	-1,677	-1,722	-1,759
Scenario 2	-980	-612	-522	-608	-640	-690	-913	-944	-976	-1,035	-1,099
Scenario 3	-980	246	811	784	811	816	566	579	592	567	537
Impact of Scenario 1 (%)	0.00	44.58	51.83	39.30	35.05	32.48	30.56	29.17	27.90	26.42	25.49
Impact of Scenario 2 (%)	0.00	-7.73	-37.41	-40.57	-42.19	-41.46	-26.10	-25.79	-25.60	-24.04	-21.55
Impact of Scenario 3 (%)	0.00	-137.04	-197.30	-176.71	-173.19	-169.28	-145.83	-145.52	-145.12	-141.59	-138.29

Table B.8. Impacts of EU Enlargement on Other NMS Corn

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested					(Thousand Hectares)						
Baseline	195	211	206	204	203	202	203	204	205	207	209
Scenario 1	195	211	215	217	219	220	221	223	225	227	229
Scenario 2	195	211	209	207	206	205	202	201	200	201	203
Scenario 3	195	211	213	213	213	213	210	208	208	209	210
Impact of Scenario 1 (%)	0.00	0.00	4.38	6.75	8.09	8.87	9.28	9.46	9.47	9.42	9.26
Impact of Scenario 2 (%)	0.00	0.00	1.50	1.92	1.82	1.56	-0.19	-1.46	-2.43	-2.86	-3.14
Impact of Scenario 3 (%)	0.00	0.00	3.15	4.56	5.06	5.17	3.44	2.16	1.13	0.65	0.29
Yield					(Metric Tons per Hectare)						
Baseline	5.18	5.29	5.30	5.31	5.32	5.34	5.35	5.36	5.37	5.38	5.39
Scenario 1	5.18	5.33	5.33	5.34	5.35	5.36	5.37	5.39	5.40	5.41	5.42
Scenario 2	5.18	5.40	5.41	5.43	5.45	5.46	5.47	5.48	5.49	5.50	5.51
Scenario 3	5.18	6.97	7.03	7.09	7.16	7.21	7.27	7.32	7.38	7.43	7.49
Impact of Scenario 1 (%)	0.00	0.64	0.54	0.54	0.54	0.54	0.55	0.54	0.54	0.53	0.54
Impact of Scenario 2 (%)	0.00	1.99	2.08	2.24	2.27	2.29	2.30	2.26	2.26	2.21	2.18
Impact of Scenario 3 (%)	0.00	31.63	32.52	33.54	34.38	35.21	36.00	36.72	37.49	38.18	38.90
Production					(Thousand Metric Tons)						
Baseline	1,010	1,116	1,093	1,081	1,079	1,078	1,083	1,092	1,102	1,114	1,128
Scenario 1	1,010	1,124	1,147	1,160	1,172	1,180	1,190	1,202	1,213	1,226	1,239
Scenario 2	1,010	1,139	1,132	1,126	1,123	1,120	1,106	1,101	1,100	1,107	1,117
Scenario 3	1,010	1,470	1,494	1,509	1,523	1,533	1,524	1,526	1,533	1,550	1,572
Impact of Scenario 1 (%)	0.00	0.64	4.95	7.33	8.68	9.46	9.88	10.05	10.06	9.99	9.85
Impact of Scenario 2 (%)	0.00	1.99	3.61	4.20	4.13	3.89	2.10	0.77	-0.22	-0.71	-1.03
Impact of Scenario 3 (%)	0.00	31.63	36.70	39.63	41.19	42.21	40.68	39.67	39.05	39.08	39.30
Domestic Supply											
Baseline	1,183	1,289	1,384	1,422	1,448	1,462	1,480	1,501	1,523	1,548	1,573
Scenario 1	1,183	1,297	1,429	1,490	1,530	1,553	1,575	1,599	1,623	1,648	1,673
Scenario 2	1,183	1,312	1,394	1,428	1,448	1,458	1,455	1,461	1,473	1,492	1,514
Scenario 3	1,183	1,643	1,756	1,812	1,848	1,871	1,873	1,887	1,906	1,936	1,970
Impact of Scenario 1 (%)	0.00	0.55	3.24	4.82	5.70	6.21	6.47	6.55	6.54	6.46	6.35
Impact of Scenario 2 (%)	0.00	1.72	0.77	0.45	0.02	-0.31	-1.67	-2.63	-3.29	-3.59	-3.72
Impact of Scenario 3 (%)	0.00	27.38	26.91	27.42	27.66	27.98	26.61	25.71	25.15	25.08	25.23
Feed Use											
Baseline	1,188	1,366	1,506	1,618	1,674	1,730	1,775	1,804	1,829	1,859	1,889
Scenario 1	1,188	1,337	1,472	1,581	1,637	1,692	1,735	1,765	1,790	1,820	1,849
Scenario 2	1,188	1,341	1,478	1,586	1,641	1,694	1,736	1,765	1,788	1,818	1,847
Scenario 3	1,188	1,341	1,477	1,585	1,640	1,694	1,736	1,764	1,787	1,817	1,846
Impact of Scenario 1 (%)	0.00	-2.09	-2.28	-2.29	-2.26	-2.24	-2.23	-2.18	-2.16	-2.12	-2.11
Impact of Scenario 2 (%)	0.00	-1.77	-1.89	-2.02	-2.02	-2.08	-2.14	-2.18	-2.25	-2.24	-2.26
Impact of Scenario 3 (%)	0.00	-1.81	-1.93	-2.06	-2.06	-2.12	-2.18	-2.22	-2.29	-2.28	-2.30
Consumption											
Baseline	1,610	1,799	1,941	2,054	2,111	2,169	2,215	2,246	2,273	2,305	2,337
Scenario 1	1,610	1,760	1,897	2,008	2,064	2,121	2,166	2,198	2,225	2,257	2,288
Scenario 2	1,610	1,761	1,898	2,006	2,062	2,117	2,161	2,191	2,216	2,248	2,278
Scenario 3	1,610	1,760	1,897	2,006	2,062	2,117	2,160	2,190	2,215	2,247	2,278
Impact of Scenario 1 (%)	0.00	-2.17	-2.27	-2.27	-2.24	-2.22	-2.21	-2.16	-2.15	-2.10	-2.09
Impact of Scenario 2 (%)	0.00	-2.13	-2.19	-2.33	-2.32	-2.38	-2.43	-2.45	-2.52	-2.50	-2.51
Impact of Scenario 3 (%)	0.00	-2.16	-2.23	-2.37	-2.36	-2.41	-2.47	-2.49	-2.56	-2.53	-2.54
Domestic Use											
Baseline	1,783	2,090	2,282	2,423	2,495	2,565	2,624	2,667	2,707	2,750	2,792
Scenario 1	1,783	2,042	2,227	2,365	2,437	2,506	2,563	2,607	2,647	2,690	2,732
Scenario 2	1,783	2,023	2,200	2,331	2,400	2,466	2,522	2,565	2,602	2,645	2,687
Scenario 3	1,783	2,023	2,200	2,331	2,400	2,466	2,521	2,564	2,602	2,645	2,687
Impact of Scenario 1 (%)	0.00	-2.31	-2.40	-2.38	-2.35	-2.32	-2.30	-2.24	-2.22	-2.16	-2.16
Impact of Scenario 2 (%)	0.00	-3.21	-3.57	-3.80	-3.83	-3.86	-3.88	-3.85	-3.88	-3.80	-3.76
Impact of Scenario 3 (%)	0.00	-3.22	-3.59	-3.82	-3.84	-3.87	-3.90	-3.87	-3.89	-3.81	-3.77
Ending Stocks											
Baseline	173	291	341	369	384	396	409	421	434	445	455
Scenario 1	173	282	330	358	373	385	397	410	422	433	444
Scenario 2	173	262	302	325	337	349	361	373	386	398	409
Scenario 3	173	263	302	325	338	349	361	374	386	398	409
Impact of Scenario 1 (%)	0.00	-3.18	-3.13	-3.01	-2.92	-2.85	-2.80	-2.69	-2.63	-2.52	-2.50
Impact of Scenario 2 (%)	0.00	-9.93	-11.42	-12.00	-12.09	-11.99	-11.73	-11.33	-10.99	-10.55	-10.17
Impact of Scenario 3 (%)	0.00	-9.82	-11.30	-11.88	-11.98	-11.87	-11.62	-11.22	-10.89	-10.46	-10.08
Net Trade											
Baseline	-600	-801	-898	-1,001	-1,048	-1,103	-1,144	-1,166	-1,184	-1,202	-1,219
Scenario 1	-600	-745	-798	-875	-907	-953	-988	-1,008	-1,024	-1,042	-1,059
Scenario 2	-600	-712	-806	-903	-952	-1,008	-1,067	-1,103	-1,129	-1,153	-1,173
Scenario 3	-600	-380	-444	-519	-551	-594	-648	-677	-695	-709	-717
Impact of Scenario 1 (%)	0.00	-6.93	-11.09	-12.62	-13.46	-13.63	-13.64	-13.56	-13.50	-13.27	-13.13
Impact of Scenario 2 (%)	0.00	-11.16	-10.26	-9.84	-9.14	-8.57	-6.74	-5.43	-4.64	-4.07	-3.80
Impact of Scenario 3 (%)	0.00	-52.50	-50.58	-48.17	-47.36	-46.10	-43.35	-41.92	-41.27	-41.03	-41.18

Table B.9. Impacts of EU Enlargement on Other NMS Barley

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested					(Thousand Hectares)						
Baseline	937	920	971	970	994	1,001	1,005	1,005	1,004	1,003	1,001
Scenario 1	937	920	942	931	949	955	958	958	957	957	955
Scenario 2	937	920	1,080	1,156	1,220	1,256	1,217	1,201	1,196	1,188	1,179
Scenario 3	937	920	1,181	1,310	1,401	1,451	1,407	1,386	1,377	1,364	1,350
Impact of Scenario 1 (%)	0.00	0.00	-3.01	-4.00	-4.46	-4.61	-4.69	-4.69	-4.64	-4.60	-4.54
Impact of Scenario 2 (%)	0.00	0.00	11.20	19.15	22.76	25.51	21.15	19.53	19.20	18.51	17.85
Impact of Scenario 3 (%)	0.00	0.00	21.66	35.06	41.02	44.97	40.06	37.97	37.19	36.04	34.94
Yield					(Metric Tons per Hectare)						
Baseline	2.36	2.53	2.52	2.53	2.54	2.55	2.56	2.56	2.57	2.58	2.59
Scenario 1	2.36	2.50	2.50	2.51	2.52	2.53	2.53	2.54	2.55	2.56	2.57
Scenario 2	2.36	2.58	2.59	2.59	2.61	2.61	2.62	2.63	2.63	2.64	2.65
Scenario 3	2.36	3.65	3.66	3.68	3.70	3.71	3.72	3.73	3.74	3.75	3.76
Impact of Scenario 1 (%)	0.00	-0.98	-0.90	-0.89	-0.85	-0.84	-0.82	-0.79	-0.78	-0.76	-0.73
Impact of Scenario 2 (%)	0.00	2.05	2.56	2.51	2.63	2.56	2.50	2.40	2.29	2.21	2.16
Impact of Scenario 3 (%)	0.00	44.42	45.30	45.39	45.65	45.62	45.53	45.40	45.21	45.10	45.01
Production					(Thousand Metric Tons)						
Baseline	2,210	2,325	2,448	2,455	2,522	2,550	2,568	2,577	2,583	2,589	2,592
Scenario 1	2,210	2,302	2,353	2,336	2,389	2,412	2,428	2,437	2,444	2,452	2,456
Scenario 2	2,210	2,373	2,792	2,999	3,178	3,282	3,189	3,155	3,150	3,137	3,120
Scenario 3	2,210	3,358	4,328	4,821	5,181	5,383	5,234	5,170	5,146	5,111	5,071
Impact of Scenario 1 (%)	0.00	-0.98	-3.88	-4.85	-5.27	-5.42	-5.47	-5.44	-5.38	-5.32	-5.23
Impact of Scenario 2 (%)	0.00	2.05	14.05	22.15	25.98	28.72	24.17	22.41	21.92	21.13	20.40
Impact of Scenario 3 (%)	0.00	44.42	76.77	96.37	105.40	111.10	103.82	100.61	99.22	97.38	95.67
Domestic Supply											
Baseline	2,566	2,629	2,742	2,768	2,848	2,891	2,921	2,943	2,960	2,976	2,989
Scenario 1	2,566	2,606	2,685	2,706	2,783	2,826	2,857	2,880	2,898	2,914	2,928
Scenario 2	2,566	2,677	3,007	3,167	3,320	3,413	3,317	3,289	3,295	3,296	3,295
Scenario 3	2,566	3,662	4,546	4,993	5,329	5,519	5,370	5,311	5,298	5,277	5,252
Impact of Scenario 1 (%)	0.00	-0.86	-2.09	-2.25	-2.28	-2.23	-2.19	-2.14	-2.09	-2.06	-2.02
Impact of Scenario 2 (%)	0.00	1.81	9.67	14.40	16.58	18.04	13.55	11.77	11.31	10.74	10.25
Impact of Scenario 3 (%)	0.00	39.29	65.78	80.40	87.13	90.92	83.80	80.49	79.00	77.31	75.75
Feed Use											
Baseline	2,075	2,239	2,464	2,625	2,718	2,804	2,872	2,916	2,950	2,995	3,045
Scenario 1	2,075	2,251	2,474	2,639	2,731	2,817	2,885	2,929	2,963	3,008	3,056
Scenario 2	2,075	2,135	2,319	2,486	2,569	2,655	2,723	2,769	2,809	2,857	2,904
Scenario 3	2,075	2,137	2,322	2,489	2,572	2,658	2,726	2,772	2,812	2,860	2,907
Impact of Scenario 1 (%)	0.00	0.54	0.44	0.52	0.46	0.48	0.46	0.44	0.45	0.44	0.38
Impact of Scenario 2 (%)	0.00	-4.66	-5.86	-5.29	-5.50	-5.30	-5.18	-5.03	-4.77	-4.60	-4.64
Impact of Scenario 3 (%)	0.00	-4.56	-5.75	-5.18	-5.39	-5.20	-5.08	-4.93	-4.67	-4.50	-4.54
Consumption											
Baseline	2,732	2,877	3,096	3,250	3,337	3,417	3,479	3,518	3,545	3,584	3,629
Scenario 1	2,732	2,898	3,117	3,274	3,361	3,441	3,503	3,541	3,569	3,607	3,650
Scenario 2	2,732	2,743	2,907	3,064	3,138	3,219	3,282	3,324	3,360	3,403	3,445
Scenario 3	2,732	2,747	2,911	3,068	3,143	3,223	3,286	3,328	3,364	3,408	3,449
Impact of Scenario 1 (%)	0.00	0.72	0.68	0.76	0.70	0.70	0.68	0.66	0.65	0.64	0.58
Impact of Scenario 2 (%)	0.00	-4.65	-6.11	-5.72	-5.96	-5.79	-5.66	-5.51	-5.23	-5.05	-5.07
Impact of Scenario 3 (%)	0.00	-4.54	-5.99	-5.60	-5.84	-5.66	-5.55	-5.39	-5.12	-4.94	-4.95
Domestic Use											
Baseline	3,036	3,171	3,409	3,575	3,679	3,770	3,845	3,894	3,932	3,981	4,038
Scenario 1	3,036	3,229	3,487	3,668	3,776	3,870	3,946	3,994	4,031	4,080	4,132
Scenario 2	3,036	2,958	3,075	3,206	3,269	3,348	3,417	3,469	3,519	3,578	3,636
Scenario 3	3,036	2,965	3,083	3,215	3,279	3,358	3,428	3,480	3,530	3,589	3,647
Impact of Scenario 1 (%)	0.00	1.84	2.29	2.60	2.64	2.67	2.62	2.57	2.53	2.47	2.34
Impact of Scenario 2 (%)	0.00	-6.70	-9.81	-10.33	-11.14	-11.21	-11.13	-10.92	-10.51	-10.13	-9.95
Impact of Scenario 3 (%)	0.00	-6.51	-9.56	-10.06	-10.85	-10.92	-10.85	-10.64	-10.23	-9.86	-9.68
Ending Stocks											
Baseline	304	294	313	325	341	353	366	377	387	397	409
Scenario 1	304	331	370	393	415	430	443	454	463	472	482
Scenario 2	304	215	168	142	130	129	135	145	159	174	191
Scenario 3	304	218	173	148	137	135	141	152	166	181	198
Impact of Scenario 1 (%)	0.00	12.79	18.17	20.97	21.57	21.64	21.14	20.44	19.74	18.95	17.96
Impact of Scenario 2 (%)	0.00	-26.82	-46.36	-56.36	-61.77	-63.61	-63.19	-61.47	-58.88	-56.07	-53.27
Impact of Scenario 3 (%)	0.00	-25.80	-44.85	-54.59	-59.91	-61.72	-61.33	-59.66	-57.12	-54.38	-51.66
Net Trade											
Baseline	-470	-542	-667	-807	-831	-879	-924	-952	-972	-1,005	-1,049
Scenario 1	-470	-623	-802	-962	-993	-1,044	-1,088	-1,115	-1,133	-1,165	-1,204
Scenario 2	-470	-282	-68	-39	51	65	-99	-180	-224	-282	-341
Scenario 3	-470	697	1,463	1,778	2,049	2,161	1,942	1,831	1,768	1,688	1,606
Impact of Scenario 1 (%)	0.00	14.96	20.28	19.24	19.47	18.77	17.84	17.13	16.60	15.88	14.74
Impact of Scenario 2 (%)	0.00	-48.01	-89.88	-95.16	-106.13	-107.39	-89.23	-81.09	-76.94	-71.92	-67.47
Impact of Scenario 3 (%)	0.00	-228.59	-319.28	-320.34	-346.60	-345.86	-310.27	-292.42	-281.93	-267.90	-253.04

Table B.10. Impacts of EU Enlargement on Poland Wheat

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested					(Thousand Hectares)						
Baseline	2,450	2,470	2,706	2,667	2,624	2,613	2,602	2,592	2,582	2,569	2,560
Scenario 1	2,450	2,470	2,624	2,593	2,555	2,546	2,537	2,527	2,520	2,509	2,502
Scenario 2	2,450	2,470	2,598	2,583	2,575	2,572	2,447	2,446	2,444	2,431	2,423
Scenario 3	2,450	2,470	2,738	2,714	2,699	2,691	2,555	2,549	2,542	2,524	2,511
Impact of Scenario 1 (%)	0.00	0.00	-3.03	-2.80	-2.63	-2.58	-2.53	-2.48	-2.39	-2.33	-2.28
Impact of Scenario 2 (%)	0.00	0.00	-3.98	-3.15	-1.86	-1.56	-5.98	-5.62	-5.33	-5.36	-5.36
Impact of Scenario 3 (%)	0.00	0.00	1.19	1.74	2.84	2.97	-1.82	-1.65	-1.54	-1.76	-1.90
Yield					(Metric Tons per Hectare)						
Baseline	3.22	3.59	3.60	3.62	3.64	3.66	3.69	3.72	3.74	3.77	3.79
Scenario 1	3.22	3.57	3.57	3.60	3.62	3.65	3.67	3.70	3.72	3.75	3.78
Scenario 2	3.22	3.55	3.56	3.59	3.62	3.65	3.67	3.70	3.72	3.75	3.77
Scenario 3	3.22	4.59	4.61	4.65	4.69	4.72	4.76	4.79	4.83	4.86	4.90
Impact of Scenario 1 (%)	0.00	-0.68	-0.61	-0.55	-0.53	-0.51	-0.49	-0.46	-0.44	-0.42	-0.40
Impact of Scenario 2 (%)	0.00	-1.26	-0.93	-0.65	-0.57	-0.53	-0.50	-0.51	-0.49	-0.47	-0.50
Impact of Scenario 3 (%)	0.00	27.76	28.21	28.55	28.72	28.84	28.91	28.95	29.00	29.08	29.10
Production					(Thousand Metric Tons)						
Baseline	7,900	8,871	9,732	9,646	9,553	9,576	9,602	9,629	9,658	9,675	9,707
Scenario 1	7,900	8,811	9,380	9,324	9,252	9,281	9,313	9,347	9,386	9,409	9,448
Scenario 2	7,900	8,759	9,257	9,281	9,322	9,377	8,983	9,041	9,098	9,113	9,141
Scenario 3	7,900	11,334	12,625	12,616	12,645	12,704	12,153	12,211	12,268	12,269	12,294
Impact of Scenario 1 (%)	0.00	-0.68	-3.61	-3.34	-3.15	-3.08	-3.01	-2.93	-2.82	-2.74	-2.67
Impact of Scenario 2 (%)	0.00	-1.26	-4.88	-3.78	-2.42	-2.08	-6.45	-6.10	-5.80	-5.81	-5.83
Impact of Scenario 3 (%)	0.00	27.76	29.73	30.79	32.37	32.67	26.57	26.82	27.02	26.81	26.65
Domestic Supply											
Baseline	8,300	9,171	10,021	10,012	9,983	10,038	10,085	10,135	10,187	10,229	10,280
Scenario 1	8,300	9,111	9,746	9,766	9,754	9,812	9,862	9,917	9,975	10,022	10,077
Scenario 2	8,300	9,059	9,690	9,768	9,839	9,913	9,534	9,613	9,693	9,732	9,777
Scenario 3	8,300	11,634	13,063	13,108	13,168	13,246	12,710	12,789	12,867	12,892	12,935
Impact of Scenario 1 (%)	0.00	-0.65	-2.74	-2.45	-2.30	-2.25	-2.21	-2.16	-2.08	-2.03	-1.98
Impact of Scenario 2 (%)	0.00	-1.22	-3.30	-2.44	-1.45	-1.24	-5.46	-5.15	-4.85	-4.86	-4.89
Impact of Scenario 3 (%)	0.00	26.86	30.36	30.93	31.90	31.96	26.03	26.18	26.31	26.04	25.82
Feed Use											
Baseline	3,200	3,106	2,844	3,136	3,247	3,295	3,330	3,374	3,427	3,496	3,545
Scenario 1	3,200	3,192	2,912	3,205	3,317	3,364	3,399	3,441	3,493	3,561	3,612
Scenario 2	3,200	3,318	3,031	3,311	3,426	3,471	3,505	3,546	3,595	3,662	3,715
Scenario 3	3,200	3,319	3,032	3,312	3,427	3,472	3,506	3,547	3,596	3,663	3,716
Impact of Scenario 1 (%)	0.00	2.77	2.39	2.21	2.16	2.11	2.07	1.99	1.94	1.87	1.87
Impact of Scenario 2 (%)	0.00	6.81	6.55	5.57	5.52	5.34	5.24	5.11	4.92	4.75	4.80
Impact of Scenario 3 (%)	0.00	6.84	6.59	5.60	5.55	5.37	5.28	5.15	4.95	4.78	4.83
Consumption											
Baseline	8,750	8,519	8,250	8,567	8,699	8,765	8,818	8,876	8,947	9,034	9,098
Scenario 1	8,750	8,737	8,475	8,791	8,920	8,982	9,028	9,079	9,144	9,225	9,286
Scenario 2	8,750	8,998	8,724	8,986	9,094	9,142	9,185	9,240	9,303	9,382	9,454
Scenario 3	8,750	9,007	8,735	8,997	9,106	9,154	9,196	9,250	9,313	9,392	9,463
Impact of Scenario 1 (%)	0.00	2.56	2.72	2.62	2.54	2.47	2.39	2.29	2.20	2.11	2.06
Impact of Scenario 2 (%)	0.00	5.62	5.74	4.89	4.55	4.31	4.17	4.09	3.98	3.86	3.91
Impact of Scenario 3 (%)	0.00	5.73	5.88	5.03	4.68	4.43	4.30	4.21	4.09	3.97	4.02
Domestic Use											
Baseline	9,050	8,808	8,615	8,998	9,160	9,248	9,324	9,405	9,501	9,607	9,689
Scenario 1	9,050	9,103	8,917	9,293	9,450	9,530	9,599	9,668	9,756	9,854	9,930
Scenario 2	9,050	9,430	9,210	9,503	9,630	9,694	9,758	9,835	9,922	10,018	10,111
Scenario 3	9,050	9,445	9,227	9,520	9,647	9,710	9,774	9,850	9,937	10,033	10,125
Impact of Scenario 1 (%)	0.00	3.35	3.50	3.29	3.16	3.06	2.94	2.80	2.68	2.57	2.49
Impact of Scenario 2 (%)	0.00	7.06	6.90	5.62	5.13	4.82	4.65	4.57	4.42	4.28	4.36
Impact of Scenario 3 (%)	0.00	7.23	7.10	5.81	5.31	5.00	4.82	4.73	4.58	4.43	4.50
Ending Stocks											
Baseline	300	289	365	431	462	483	507	529	554	573	591
Scenario 1	300	366	442	502	530	549	570	589	612	629	645
Scenario 2	300	432	486	518	536	551	572	595	619	636	657
Scenario 3	300	438	492	523	541	556	577	600	624	641	662
Impact of Scenario 1 (%)	0.00	26.74	21.04	16.54	14.80	13.71	12.55	11.44	10.44	9.74	9.12
Impact of Scenario 2 (%)	0.00	49.71	33.04	20.14	16.03	14.20	13.02	12.52	11.68	11.02	11.23
Impact of Scenario 3 (%)	0.00	51.57	34.57	21.39	17.17	15.26	14.00	13.43	12.50	11.79	11.95
Net Trade											
Baseline	-750	363	1,405	1,014	823	790	761	730	686	622	592
Scenario 1	-750	8	829	473	304	281	264	248	219	168	147
Scenario 2	-750	-371	480	264	209	219	-224	-221	-228	-286	-334
Scenario 3	-750	2,189	3,836	3,588	3,521	3,535	2,936	2,939	2,931	2,860	2,810
Impact of Scenario 1 (%)	0.00	-97.88	-40.99	-53.34	-63.05	-64.41	-65.33	-66.00	-68.01	-73.01	-75.21
Impact of Scenario 2 (%)	0.00	-202.21	-65.87	-73.94	-74.61	-72.24	-129.44	-130.28	-133.31	-146.02	-156.38
Impact of Scenario 3 (%)	0.00	503.27	172.96	253.79	327.87	347.62	285.84	302.57	327.41	359.41	375.02

Table B.11. Impacts of EU Enlargement on Poland Corn

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested					(Thousand Hectares)						
Baseline	350	351	296	292	294	313	313	312	312	311	311
Scenario 1	350	351	301	296	298	317	317	316	315	315	314
Scenario 2	350	351	320	316	317	337	320	321	320	319	318
Scenario 3	350	351	323	319	320	341	324	325	325	324	323
Impact of Scenario 1 (%)	0.00	0.00	1.70	1.38	1.32	1.22	1.22	1.23	1.19	1.20	1.16
Impact of Scenario 2 (%)	0.00	0.00	8.17	7.94	7.93	7.50	2.40	2.60	2.70	2.56	2.38
Impact of Scenario 3 (%)	0.00	0.00	9.21	9.03	9.11	8.72	3.67	3.96	4.12	4.04	3.93
Yield					(Metric Tons per Hectare)						
Baseline	5.43	6.07	6.13	6.19	6.25	6.32	6.38	6.45	6.51	6.58	6.64
Scenario 1	5.43	6.09	6.14	6.20	6.27	6.33	6.40	6.46	6.53	6.59	6.66
Scenario 2	5.43	6.18	6.24	6.30	6.37	6.43	6.50	6.56	6.62	6.69	6.75
Scenario 3	5.43	7.09	7.18	7.30	7.42	7.54	7.66	7.77	7.89	8.01	8.13
Impact of Scenario 1 (%)	0.00	0.35	0.24	0.25	0.24	0.24	0.25	0.24	0.25	0.23	0.24
Impact of Scenario 2 (%)	0.00	1.81	1.80	1.88	1.87	1.87	1.83	1.76	1.72	1.65	1.59
Impact of Scenario 3 (%)	0.00	16.73	17.27	18.01	18.71	19.42	20.04	20.60	21.18	21.74	22.29
Production					(Thousand Metric Tons)						
Baseline	1,900	2,130	1,812	1,809	1,836	1,979	1,997	2,014	2,030	2,047	2,065
Scenario 1	1,900	2,137	1,847	1,839	1,864	2,008	2,027	2,044	2,060	2,076	2,095
Scenario 2	1,900	2,168	1,995	1,990	2,018	2,167	2,083	2,103	2,121	2,134	2,148
Scenario 3	1,900	2,486	2,320	2,328	2,378	2,569	2,486	2,525	2,562	2,593	2,625
Impact of Scenario 1 (%)	0.00	0.35	1.95	1.62	1.57	1.47	1.48	1.48	1.44	1.43	1.41
Impact of Scenario 2 (%)	0.00	1.81	10.11	9.98	9.95	9.51	4.28	4.41	4.47	4.25	4.01
Impact of Scenario 3 (%)	0.00	16.73	28.06	28.67	29.53	29.83	24.45	25.37	26.17	26.66	27.10
Domestic Supply											
Baseline	2,478	2,628	2,272	2,250	2,266	2,405	2,421	2,438	2,456	2,475	2,496
Scenario 1	2,478	2,635	2,305	2,276	2,291	2,429	2,445	2,462	2,480	2,499	2,520
Scenario 2	2,478	2,666	2,442	2,408	2,420	2,560	2,470	2,489	2,508	2,523	2,540
Scenario 3	2,478	2,984	2,767	2,747	2,780	2,962	2,873	2,911	2,948	2,982	3,017
Impact of Scenario 1 (%)	0.00	0.28	1.44	1.15	1.08	1.01	1.02	1.01	0.98	0.97	0.95
Impact of Scenario 2 (%)	0.00	1.47	7.47	7.03	6.78	6.44	2.03	2.08	2.11	1.93	1.76
Impact of Scenario 3 (%)	0.00	13.56	21.79	22.07	22.65	23.18	18.69	19.42	20.07	20.48	20.88
Feed Use											
Baseline	1,900	1,936	1,805	1,992	2,071	2,106	2,134	2,169	2,208	2,256	2,295
Scenario 1	1,900	1,925	1,795	1,981	2,060	2,094	2,122	2,157	2,196	2,244	2,283
Scenario 2	1,900	1,884	1,747	1,923	1,999	2,031	2,059	2,094	2,133	2,182	2,222
Scenario 3	1,900	1,884	1,747	1,924	1,999	2,032	2,059	2,095	2,133	2,182	2,222
Impact of Scenario 1 (%)	0.00	-0.56	-0.54	-0.54	-0.53	-0.53	-0.54	-0.52	-0.53	-0.51	-0.52
Impact of Scenario 2 (%)	0.00	-2.68	-3.20	-3.46	-3.50	-3.52	-3.51	-3.43	-3.38	-3.29	-3.20
Impact of Scenario 3 (%)	0.00	-2.66	-3.18	-3.44	-3.48	-3.50	-3.49	-3.41	-3.36	-3.27	-3.18
Consumption											
Baseline	2,000	2,045	1,916	2,103	2,182	2,216	2,244	2,279	2,318	2,366	2,404
Scenario 1	2,000	2,033	1,904	2,091	2,170	2,204	2,231	2,266	2,305	2,353	2,391
Scenario 2	2,000	1,987	1,851	2,027	2,102	2,135	2,162	2,197	2,236	2,284	2,324
Scenario 3	2,000	1,987	1,851	2,027	2,103	2,135	2,163	2,198	2,236	2,285	2,325
Impact of Scenario 1 (%)	0.00	-0.61	-0.59	-0.58	-0.57	-0.57	-0.58	-0.56	-0.56	-0.55	-0.55
Impact of Scenario 2 (%)	0.00	-2.88	-3.38	-3.63	-3.65	-3.67	-3.65	-3.57	-3.52	-3.43	-3.33
Impact of Scenario 3 (%)	0.00	-2.86	-3.37	-3.61	-3.63	-3.66	-3.64	-3.56	-3.51	-3.42	-3.32
Domestic Use											
Baseline	2,498	2,506	2,356	2,534	2,608	2,640	2,668	2,704	2,746	2,797	2,838
Scenario 1	2,498	2,491	2,342	2,518	2,591	2,622	2,650	2,686	2,727	2,778	2,819
Scenario 2	2,498	2,434	2,269	2,429	2,495	2,522	2,548	2,584	2,625	2,676	2,720
Scenario 3	2,498	2,434	2,270	2,430	2,496	2,523	2,549	2,585	2,626	2,677	2,720
Impact of Scenario 1 (%)	0.00	-0.60	-0.63	-0.65	-0.65	-0.66	-0.68	-0.67	-0.67	-0.66	-0.66
Impact of Scenario 2 (%)	0.00	-2.89	-3.70	-4.15	-4.33	-4.46	-4.50	-4.45	-4.40	-4.30	-4.18
Impact of Scenario 3 (%)	0.00	-2.87	-3.67	-4.13	-4.30	-4.43	-4.47	-4.42	-4.37	-4.27	-4.16
Ending Stocks											
Baseline	498	461	441	431	426	424	424	425	428	431	434
Scenario 1	498	458	437	427	421	419	419	420	423	425	428
Scenario 2	498	447	419	402	392	387	386	387	389	392	395
Scenario 3	498	448	419	402	393	388	386	387	389	392	396
Impact of Scenario 1 (%)	0.00	-0.57	-0.81	-0.97	-1.08	-1.16	-1.22	-1.25	-1.27	-1.26	-1.28
Impact of Scenario 2 (%)	0.00	-2.93	-5.08	-6.72	-7.83	-8.56	-8.99	-9.14	-9.16	-9.05	-8.87
Impact of Scenario 3 (%)	0.00	-2.89	-5.02	-6.65	-7.74	-8.47	-8.90	-9.05	-9.06	-8.96	-8.78
Net Trade											
Baseline	-20	122	-84	-284	-341	-235	-247	-266	-290	-322	-342
Scenario 1	-20	144	-36	-242	-300	-193	-205	-224	-248	-279	-299
Scenario 2	-20	232	173	-21	-75	37	-78	-95	-117	-153	-179
Scenario 3	-20	550	498	317	284	439	325	327	323	305	297
Impact of Scenario 1 (%)	0.00	18.47	-56.70	-14.87	-12.16	-17.84	-17.29	-16.01	-14.64	-13.15	-12.43
Impact of Scenario 2 (%)	0.00	91.13	-305.63	-92.67	-78.14	-115.95	-68.50	-64.24	-59.52	-52.27	-47.53
Impact of Scenario 3 (%)	0.00	352.00	-692.01	-211.56	-183.34	-286.92	-231.25	-222.54	-211.23	-194.79	-186.86

Table B.12. Impacts of EU Enlargement on Poland Barley

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Area Harvested					(Thousand Hectares)						
Baseline	1,000	972	1,051	1,044	1,041	1,035	1,034	1,032	1,030	1,028	1,026
Scenario 1	1,000	972	1,035	1,031	1,029	1,023	1,023	1,021	1,019	1,017	1,016
Scenario 2	1,000	972	1,060	1,074	1,075	1,077	1,029	1,023	1,025	1,019	1,015
Scenario 3	1,000	972	1,077	1,093	1,095	1,097	1,049	1,043	1,045	1,039	1,035
Impact of Scenario 1 (%)	0.00	0.00	-1.50	-1.27	-1.21	-1.14	-1.13	-1.10	-1.05	-1.02	-0.99
Impact of Scenario 2 (%)	0.00	0.00	0.83	2.83	3.23	3.99	-0.56	-0.87	-0.53	-0.88	-1.15
Impact of Scenario 3 (%)	0.00	0.00	2.45	4.69	5.14	5.97	1.38	1.08	1.44	1.07	0.84
Yield					(Metric Tons per Hectare)						
Baseline	2.80	3.14	3.17	3.21	3.25	3.30	3.34	3.39	3.43	3.48	3.52
Scenario 1	2.80	3.12	3.16	3.20	3.24	3.29	3.33	3.38	3.42	3.47	3.51
Scenario 2	2.80	3.11	3.16	3.20	3.25	3.29	3.34	3.38	3.42	3.47	3.51
Scenario 3	2.80	3.59	3.66	3.72	3.79	3.87	3.94	4.01	4.07	4.15	4.22
Impact of Scenario 1 (%)	0.00	-0.37	-0.31	-0.29	-0.26	-0.25	-0.23	-0.21	-0.20	-0.18	-0.16
Impact of Scenario 2 (%)	0.00	-0.97	-0.22	-0.23	-0.05	-0.08	-0.09	-0.12	-0.18	-0.20	-0.18
Impact of Scenario 3 (%)	0.00	14.34	15.37	15.84	16.68	17.30	17.84	18.32	18.74	19.29	19.81
Production					(Thousand Metric Tons)						
Baseline	2,800	3,048	3,331	3,352	3,386	3,413	3,456	3,494	3,534	3,573	3,613
Scenario 1	2,800	3,036	3,270	3,300	3,336	3,366	3,409	3,449	3,490	3,530	3,572
Scenario 2	2,800	3,018	3,351	3,439	3,494	3,547	3,434	3,460	3,509	3,535	3,565
Scenario 3	2,800	3,485	3,936	4,065	4,154	4,243	4,129	4,179	4,256	4,308	4,365
Impact of Scenario 1 (%)	0.00	-0.37	-1.81	-1.56	-1.47	-1.39	-1.36	-1.31	-1.24	-1.21	-1.15
Impact of Scenario 2 (%)	0.00	-0.97	0.61	2.59	3.17	3.91	-0.65	-0.99	-0.71	-1.08	-1.33
Impact of Scenario 3 (%)	0.00	14.34	18.19	21.28	22.68	24.31	19.47	19.60	20.44	20.57	20.81
Domestic Supply											
Baseline	2,985	3,083	3,372	3,410	3,453	3,488	3,535	3,578	3,622	3,666	3,709
Scenario 1	2,985	3,071	3,315	3,362	3,409	3,445	3,493	3,537	3,582	3,626	3,671
Scenario 2	2,985	3,053	3,402	3,503	3,566	3,624	3,515	3,545	3,599	3,630	3,664
Scenario 3	2,985	3,520	3,989	4,130	4,227	4,321	4,211	4,266	4,347	4,405	4,465
Impact of Scenario 1 (%)	0.00	-0.37	-1.67	-1.40	-1.29	-1.23	-1.20	-1.16	-1.10	-1.07	-1.02
Impact of Scenario 2 (%)	0.00	-0.96	0.91	2.72	3.25	3.89	-0.58	-0.92	-0.63	-0.98	-1.21
Impact of Scenario 3 (%)	0.00	14.17	18.30	21.13	22.41	23.88	19.11	19.21	20.03	20.15	20.39
Feed Use											
Baseline	2,600	2,442	2,238	2,441	2,529	2,563	2,590	2,625	2,663	2,715	2,758
Scenario 1	2,600	2,440	2,235	2,438	2,526	2,559	2,586	2,621	2,659	2,711	2,753
Scenario 2	2,600	2,449	2,225	2,432	2,514	2,549	2,577	2,614	2,655	2,709	2,751
Scenario 3	2,600	2,451	2,227	2,434	2,516	2,551	2,579	2,616	2,657	2,711	2,753
Impact of Scenario 1 (%)	0.00	-0.10	-0.14	-0.12	-0.14	-0.14	-0.14	-0.15	-0.15	-0.16	-0.18
Impact of Scenario 2 (%)	0.00	0.27	-0.57	-0.40	-0.59	-0.53	-0.49	-0.42	-0.29	-0.22	-0.25
Impact of Scenario 3 (%)	0.00	0.35	-0.48	-0.31	-0.50	-0.45	-0.41	-0.35	-0.22	-0.14	-0.18
Consumption											
Baseline	3,300	3,029	2,832	3,048	3,154	3,202	3,244	3,293	3,346	3,412	3,471
Scenario 1	3,300	3,045	2,851	3,067	3,172	3,220	3,261	3,309	3,361	3,426	3,483
Scenario 2	3,300	3,097	2,879	3,100	3,195	3,244	3,286	3,338	3,396	3,464	3,521
Scenario 3	3,300	3,101	2,884	3,105	3,201	3,249	3,292	3,342	3,400	3,469	3,526
Impact of Scenario 1 (%)	0.00	0.51	0.65	0.64	0.58	0.56	0.52	0.47	0.44	0.41	0.35
Impact of Scenario 2 (%)	0.00	2.24	1.67	1.71	1.31	1.31	1.31	1.35	1.49	1.53	1.44
Impact of Scenario 3 (%)	0.00	2.38	1.84	1.88	1.48	1.48	1.47	1.50	1.63	1.67	1.57
Domestic Use											
Baseline	3,335	3,070	2,890	3,115	3,229	3,282	3,328	3,381	3,438	3,508	3,571
Scenario 1	3,335	3,090	2,913	3,139	3,252	3,304	3,349	3,401	3,457	3,525	3,587
Scenario 2	3,335	3,148	2,943	3,172	3,273	3,325	3,372	3,428	3,491	3,563	3,625
Scenario 3	3,335	3,153	2,949	3,178	3,279	3,332	3,378	3,434	3,497	3,569	3,630
Impact of Scenario 1 (%)	0.00	0.64	0.80	0.78	0.71	0.68	0.64	0.58	0.54	0.50	0.43
Impact of Scenario 2 (%)	0.00	2.55	1.85	1.82	1.35	1.34	1.33	1.37	1.53	1.58	1.50
Impact of Scenario 3 (%)	0.00	2.71	2.05	2.03	1.55	1.53	1.51	1.55	1.70	1.74	1.65
Ending Stocks											
Baseline	35	41	58	67	75	80	84	88	92	96	100
Scenario 1	35	45	62	72	80	84	88	92	96	99	103
Scenario 2	35	51	64	72	77	81	86	90	95	99	103
Scenario 3	35	52	65	73	79	82	87	91	96	100	104
Impact of Scenario 1 (%)	0.00	9.65	8.32	7.32	6.24	5.68	5.08	4.47	4.01	3.66	3.17
Impact of Scenario 2 (%)	0.00	25.19	10.54	7.06	3.03	2.21	1.92	2.25	3.05	3.50	3.41
Impact of Scenario 3 (%)	0.00	27.20	12.40	8.73	4.53	3.61	3.20	3.44	4.14	4.52	4.36
Net Trade											
Baseline	-350	13	482	295	224	207	207	197	184	158	138
Scenario 1	-350	-18	402	223	157	142	144	136	125	101	85
Scenario 2	-350	-95	459	331	293	299	143	118	108	67	40
Scenario 3	-350	366	1,040	952	948	990	833	832	851	836	835
Impact of Scenario 1 (%)	0.00	-245.17	-16.51	-24.37	-30.15	-31.50	-30.68	-30.98	-31.80	-35.92	-38.73
Impact of Scenario 2 (%)	0.00	-857.47	-4.70	12.23	30.58	44.39	-31.18	-40.33	-41.11	-57.73	-71.27
Impact of Scenario 3 (%)	0.00	2,811.91	115.76	222.91	322.84	378.64	301.57	322.33	363.19	428.54	505.47

Table B.13. Impacts of EU Enlargement on Grain Prices

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
European Union 25											
Wheat Domestic Price					(Euro per Metric Ton)						
Baseline	120	118	120	117	117	117	115	113	112	111	110
Scenario 1	120	118	120	117	117	117	115	113	112	112	111
Scenario 2	120	118	120	117	117	116	115	113	112	111	110
Scenario 3	120	117	119	117	116	116	115	112	111	111	110
Impact of Scenario 1 (%)	0.00	0.13	0.15	0.06	0.05	0.09	0.10	0.08	0.08	0.09	0.09
Impact of Scenario 2 (%)	0.00	-0.04	-0.16	-0.17	-0.14	-0.14	0.05	-0.03	-0.13	-0.08	-0.06
Impact of Scenario 3 (%)	0.00	-0.83	-0.93	-0.58	-0.60	-0.81	-0.57	-0.62	-0.77	-0.76	-0.71
Corn Domestic Price											
Baseline	139	124	130	128	127	126	123	123	121	121	118
Scenario 1	139	124	130	128	127	126	123	123	121	121	118
Scenario 2	139	124	130	128	127	126	123	123	121	121	118
Scenario 3	139	123	130	128	127	125	123	123	121	121	118
Impact of Scenario 1 (%)	0.00	0.03	0.05	0.04	0.03	0.02	0.03	0.04	0.03	0.03	0.03
Impact of Scenario 2 (%)	0.00	-0.02	-0.07	-0.08	-0.08	-0.07	-0.01	-0.02	-0.04	-0.09	-0.08
Impact of Scenario 3 (%)	0.00	-0.24	-0.33	-0.33	-0.28	-0.27	-0.25	-0.30	-0.29	-0.29	-0.33
Barley Domestic Price											
Baseline	113	112	115	112	111	111	109	108	107	106	104
Scenario 1	113	112	115	112	111	111	109	108	107	106	104
Scenario 2	113	112	114	112	111	110	109	107	107	106	104
Scenario 3	113	111	113	111	110	109	108	107	106	105	103
Impact of Scenario 1 (%)	0.00	0.12	0.14	0.08	0.07	0.09	0.10	0.10	0.09	0.09	0.10
Impact of Scenario 2 (%)	0.00	-0.09	-0.28	-0.28	-0.26	-0.27	-0.03	-0.13	-0.20	-0.21	-0.17
Impact of Scenario 3 (%)	0.00	-0.99	-1.09	-0.90	-0.88	-1.07	-0.79	-0.92	-1.02	-1.04	-1.04
World											
Wheat U.S. FOB Gulf					(U.S. Dollars per Metric Ton)						
Baseline	145	141	140	138	139	141	142	144	145	146	149
Scenario 1	145	142	142	140	141	142	143	145	146	148	150
Scenario 2	145	141	139	137	137	139	142	143	144	146	148
Scenario 3	145	133	130	128	129	130	133	134	135	136	138
Impact of Scenario 1 (%)	0.00	0.89	1.16	0.99	0.98	0.98	0.94	0.92	0.90	0.89	0.87
Impact of Scenario 2 (%)	0.00	-0.17	-0.85	-1.26	-1.41	-1.47	-0.19	-0.46	-0.52	-0.39	-0.32
Impact of Scenario 3 (%)	0.00	-5.30	-6.88	-7.09	-7.68	-7.85	-6.34	-6.75	-6.98	-6.92	-6.96
Corn U.S. FOB Gulf											
Baseline	104	106	106	105	107	107	107	108	108	109	110
Scenario 1	104	106	106	105	107	107	107	108	108	109	110
Scenario 2	104	105	105	104	105	106	107	107	107	108	109
Scenario 3	104	101	102	100	102	102	103	102	103	103	104
Impact of Scenario 1 (%)	0.00	0.09	0.10	0.09	0.05	0.06	0.03	0.04	0.02	0.03	0.01
Impact of Scenario 2 (%)	0.00	-0.67	-0.88	-1.06	-1.11	-1.19	-0.57	-0.92	-0.67	-0.87	-0.62
Impact of Scenario 3 (%)	0.00	-4.40	-3.11	-4.82	-4.10	-5.17	-3.85	-4.98	-4.36	-5.15	-4.64
Barley Canada Feed											
Baseline	92	89	85	88	88	89	90	91	93	94	95
Scenario 1	92	90	87	89	89	90	91	93	94	95	96
Scenario 2	92	88	82	84	84	85	88	89	91	92	93
Scenario 3	92	79	74	75	73	74	78	78	79	80	81
Impact of Scenario 1 (%)	0.00	1.26	1.68	1.42	1.50	1.47	1.44	1.40	1.38	1.37	1.32
Impact of Scenario 2 (%)	0.00	-1.07	-3.75	-3.81	-4.67	-4.77	-1.96	-3.02	-2.52	-2.49	-2.33
Impact of Scenario 3 (%)	0.00	-11.22	-13.31	-15.05	-16.15	-17.11	-13.41	-15.15	-14.58	-14.91	-14.91

Table B.13. Impacts of EU Enlargement on Grain Prices (continued)

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Czech Republic											
Wheat Domestic Price					(Koruny per Metric Ton)						
Baseline	5,040	6,168	5,721	5,366	5,142	4,921	4,748	4,779	4,789	4,794	4,828
Scenario 1	5,040	5,658	5,253	4,929	4,724	4,522	4,366	4,402	4,413	4,420	4,455
Scenario 2	5,040	7,782	7,489	7,300	7,072	6,796	6,557	6,571	6,574	6,578	6,559
Scenario 3	5,040	7,722	7,431	7,243	7,017	6,744	6,506	6,520	6,523	6,527	6,508
Impact of Scenario 1 (%)	0.00	-8.27	-8.18	-8.15	-8.15	-8.11	-8.05	-7.89	-7.85	-7.80	-7.73
Impact of Scenario 2 (%)	0.00	26.17	30.91	36.03	37.52	38.10	38.09	37.49	37.27	37.21	35.85
Impact of Scenario 3 (%)	0.00	25.19	29.90	34.97	36.45	37.03	37.02	36.42	36.21	36.15	34.80
Corn Domestic Price											
Baseline	3,477	2,641	2,467	2,340	2,248	2,144	2,057	2,050	2,041	2,039	2,036
Scenario 1	3,477	2,842	2,627	2,500	2,404	2,298	2,212	2,206	2,205	2,201	2,208
Scenario 2	3,477	3,398	3,240	3,163	3,068	2,954	2,858	2,859	2,870	2,868	2,872
Scenario 3	3,477	3,389	3,232	3,154	3,060	2,946	2,850	2,852	2,863	2,861	2,864
Impact of Scenario 1 (%)	0.00	7.61	6.48	6.82	6.93	7.18	7.57	7.61	8.02	7.96	8.48
Impact of Scenario 2 (%)	0.00	28.65	31.34	35.16	36.47	37.75	38.97	39.48	40.65	40.67	41.08
Impact of Scenario 3 (%)	0.00	28.30	30.99	34.80	36.10	37.38	38.60	39.10	40.27	40.29	40.70
Barley Domestic Price											
Baseline	3,208	6,486	5,797	5,675	5,386	5,200	5,023	5,063	5,115	5,139	5,131
Scenario 1	3,208	6,196	5,542	5,428	5,159	4,983	4,820	4,867	4,920	4,947	4,952
Scenario 2	3,208	6,889	6,618	6,458	6,260	6,018	5,809	5,822	5,827	5,832	5,827
Scenario 3	3,208	6,833	6,564	6,406	6,209	5,969	5,762	5,775	5,779	5,784	5,779
Impact of Scenario 1 (%)	0.00	-4.48	-4.40	-4.35	-4.21	-4.17	-4.05	-3.88	-3.81	-3.74	-3.50
Impact of Scenario 2 (%)	0.00	6.21	14.16	13.79	16.23	15.73	15.64	14.99	13.91	13.48	13.55
Impact of Scenario 3 (%)	0.00	5.35	13.23	12.87	15.29	14.79	14.70	14.06	12.98	12.56	12.63
Hungary											
Wheat Domestic Price					(Florint per Metric Ton)						
Baseline	43,282	39,824	37,387	35,731	35,484	35,632	34,152	34,373	34,444	34,485	34,863
Scenario 1	43,282	33,541	31,521	30,135	29,927	30,065	28,835	29,072	29,143	29,194	29,535
Scenario 2	43,282	50,498	49,190	48,850	49,044	49,456	47,399	47,497	47,520	47,556	47,600
Scenario 3	43,282	50,106	48,809	48,471	48,663	49,072	47,032	47,128	47,152	47,187	47,231
Impact of Scenario 1 (%)	0.00	-15.78	-15.69	-15.66	-15.66	-15.63	-15.57	-15.42	-15.39	-15.34	-15.28
Impact of Scenario 2 (%)	0.00	26.80	31.57	36.71	38.21	38.79	38.79	38.18	37.96	37.90	36.53
Impact of Scenario 3 (%)	0.00	25.82	30.55	35.65	37.14	37.72	37.71	37.11	36.89	36.83	35.48
Corn Domestic Price											
Baseline	30,927	23,849	22,549	21,789	21,695	21,712	20,686	20,619	20,528	20,512	20,556
Scenario 1	30,927	22,748	21,281	20,630	20,563	20,628	19,723	19,667	19,655	19,628	19,766
Scenario 2	30,927	31,378	30,289	30,120	30,279	30,588	29,401	29,412	29,529	29,510	29,660
Scenario 3	30,927	31,294	30,208	30,039	30,198	30,506	29,322	29,333	29,450	29,431	29,581
Impact of Scenario 1 (%)	0.00	-4.62	-5.62	-5.32	-5.22	-5.00	-4.65	-4.62	-4.25	-4.31	-3.84
Impact of Scenario 2 (%)	0.00	31.57	34.33	38.23	39.57	40.88	42.13	42.64	43.85	43.86	44.29
Impact of Scenario 3 (%)	0.00	31.22	33.97	37.86	39.19	40.50	41.75	42.26	43.46	43.48	43.90
Barley Domestic Price											
Baseline	27,714	49,296	44,597	44,482	43,746	44,315	42,527	42,864	43,307	43,512	43,614
Scenario 1	27,714	42,973	38,910	38,829	38,246	38,756	37,239	37,601	38,017	38,225	38,410
Scenario 2	27,714	55,134	53,611	53,302	53,545	54,008	51,787	51,904	51,947	51,996	52,150
Scenario 3	27,714	54,688	53,177	52,870	53,111	53,570	51,367	51,483	51,527	51,575	51,728
Impact of Scenario 1 (%)	0.00	-12.83	-12.75	-12.71	-12.57	-12.54	-12.44	-12.28	-12.22	-12.15	-11.93
Impact of Scenario 2 (%)	0.00	11.84	20.21	19.83	22.40	21.87	21.77	21.09	19.95	19.50	19.57
Impact of Scenario 3 (%)	0.00	10.94	19.24	18.86	21.41	20.88	20.79	20.11	18.98	18.53	18.60

Table B.13. Impacts of EU Enlargement on Grain Prices (continued)

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Other NMS											
Wheat Domestic Price					(U.S. Dollars per Metric Ton)						
Baseline	191	214	212	210	211	213	215	218	220	222	225
Scenario 1	191	180	179	177	179	180	182	185	186	188	191
Scenario 2	191	236	243	250	254	258	260	262	264	267	268
Scenario 3	191	234	241	248	252	256	258	260	262	265	266
Impact of Scenario 1 (%)	0.00	-15.63	-15.54	-15.51	-15.51	-15.48	-15.42	-15.27	-15.24	-15.19	-15.13
Impact of Scenario 2 (%)	0.00	10.46	14.61	19.09	20.40	20.91	20.90	20.37	20.18	20.13	18.94
Impact of Scenario 3 (%)	0.00	9.60	13.73	18.17	19.47	19.97	19.96	19.44	19.25	19.20	18.01
Corn Domestic Price											
Baseline	118	97	97	96	97	98	98	99	99	100	100
Scenario 1	118	106	105	105	107	107	108	109	109	110	111
Scenario 2	118	127	130	133	136	138	140	141	142	143	145
Scenario 3	118	127	129	133	136	138	139	140	142	143	144
Impact of Scenario 1 (%)	0.00	10.13	8.97	9.31	9.43	9.69	10.08	10.13	10.55	10.48	11.02
Impact of Scenario 2 (%)	0.00	31.65	34.41	38.32	39.65	40.96	42.22	42.73	43.93	43.95	44.38
Impact of Scenario 3 (%)	0.00	31.30	34.05	37.95	39.28	40.59	41.84	42.35	43.55	43.57	43.99
Barley Domestic Price											
Baseline	123	166	159	163	163	166	168	170	173	175	176
Scenario 1	123	144	138	142	142	145	147	149	152	154	155
Scenario 2	123	211	217	223	227	230	232	235	236	238	240
Scenario 3	123	209	215	221	225	228	230	233	235	237	238
Impact of Scenario 1 (%)	0.00	-12.98	-12.91	-12.86	-12.73	-12.70	-12.59	-12.44	-12.37	-12.31	-12.09
Impact of Scenario 2 (%)	0.00	27.23	36.75	36.31	39.24	38.64	38.53	37.75	36.45	35.94	36.02
Impact of Scenario 3 (%)	0.00	26.20	35.64	35.21	38.11	37.51	37.40	36.63	35.35	34.84	34.92
Poland											
Wheat Domestic Price					(Zlotys per Metric Ton)						
Baseline	694	708	658	622	612	610	610	614	615	621	625
Scenario 1	694	643	598	565	556	554	555	560	561	566	571
Scenario 2	694	586	565	555	552	553	553	554	554	559	557
Scenario 3	694	582	561	551	548	548	549	550	550	555	553
Impact of Scenario 1 (%)	0.00	-9.24	-9.15	-9.12	-9.12	-9.08	-9.02	-8.86	-8.83	-8.78	-8.71
Impact of Scenario 2 (%)	0.00	-17.19	-14.08	-10.72	-9.74	-9.36	-9.36	-9.76	-9.90	-9.94	-10.83
Impact of Scenario 3 (%)	0.00	-17.83	-14.74	-11.41	-10.44	-10.06	-10.07	-10.46	-10.60	-10.64	-11.53
Corn Domestic Price											
Baseline	486	378	353	338	333	331	329	328	327	329	328
Scenario 1	486	396	367	352	347	346	345	344	344	346	347
Scenario 2	486	474	453	445	443	444	446	446	448	451	452
Scenario 3	486	472	451	444	442	443	445	445	447	450	450
Impact of Scenario 1 (%)	0.00	4.92	3.82	4.15	4.26	4.50	4.88	4.92	5.32	5.26	5.77
Impact of Scenario 2 (%)	0.00	25.43	28.06	31.78	33.05	34.30	35.50	35.99	37.13	37.15	37.56
Impact of Scenario 3 (%)	0.00	25.10	27.72	31.43	32.70	33.94	35.13	35.62	36.77	36.78	37.19
Barley Domestic Price											
Baseline	433	577	517	510	496	499	500	504	509	516	515
Scenario 1	433	557	499	492	480	483	485	489	495	501	502
Scenario 2	433	524	504	496	493	494	494	495	496	500	500
Scenario 3	433	520	500	492	489	490	490	491	492	496	496
Impact of Scenario 1 (%)	0.00	-3.53	-3.45	-3.40	-3.25	-3.22	-3.09	-2.92	-2.85	-2.78	-2.54
Impact of Scenario 2 (%)	0.00	-9.21	-2.41	-2.73	-0.64	-1.07	-1.15	-1.70	-2.63	-2.99	-2.93
Impact of Scenario 3 (%)	0.00	-9.94	-3.20	-3.51	-1.44	-1.87	-1.95	-2.50	-3.41	-3.78	-3.72

Table B.14. Impacts of EU Enlargement on Grain Production

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
European Union 15											
Wheat Production						(Thousand Metric Ton)					
Baseline	91,000	102,791	101,305	103,205	103,614	104,791	105,637	106,153	106,642	107,066	107,553
Scenario 1	91,000	102,799	101,325	103,237	103,643	104,812	105,658	106,178	106,667	107,089	107,575
Scenario 2	91,000	102,788	101,293	103,176	103,572	104,748	105,609	106,136	106,638	107,050	107,527
Scenario 3	91,000	102,738	101,179	102,987	103,400	104,609	105,455	105,960	106,465	106,879	107,348
Impact of Scenario 1 (%)	0.00	0.01	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
Impact of Scenario 2 (%)	0.00	0.00	-0.01	-0.03	-0.04	-0.04	-0.03	-0.02	0.00	-0.01	-0.02
Impact of Scenario 3 (%)	0.00	-0.05	-0.13	-0.21	-0.21	-0.17	-0.17	-0.18	-0.17	-0.18	-0.19
Corn Production											
Baseline	30,500	38,468	37,761	38,435	38,631	38,903	39,037	39,121	39,473	39,550	39,877
Scenario 1	30,500	38,469	37,761	38,434	38,630	38,904	39,037	39,120	39,472	39,550	39,876
Scenario 2	30,500	38,468	37,760	38,435	38,631	38,903	39,037	39,121	39,471	39,549	39,876
Scenario 3	30,500	38,463	37,761	38,442	38,632	38,897	39,038	39,125	39,471	39,549	39,880
Impact of Scenario 1 (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact of Scenario 2 (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00
Impact of Scenario 3 (%)	0.00	-0.01	0.00	0.02	0.00	-0.02	0.00	0.01	0.00	0.00	0.01
Barley Production											
Baseline	46,800	50,897	50,481	50,848	51,135	51,698	52,115	52,519	52,930	53,346	53,804
Scenario 1	46,800	50,901	50,490	50,862	51,148	51,708	52,125	52,530	52,941	53,357	53,815
Scenario 2	46,800	50,894	50,468	50,824	51,101	51,663	52,088	52,497	52,915	53,325	53,780
Scenario 3	46,800	50,863	50,407	50,730	51,012	51,578	52,000	52,402	52,819	53,227	53,679
Impact of Scenario 1 (%)	0.00	0.01	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
Impact of Scenario 2 (%)	0.00	-0.01	-0.03	-0.05	-0.07	-0.07	-0.05	-0.04	-0.03	-0.04	-0.04
Impact of Scenario 3 (%)	0.00	-0.07	-0.15	-0.23	-0.24	-0.23	-0.22	-0.22	-0.21	-0.22	-0.23
World											
Wheat Production						(Thousand Metric Ton)					
Baseline	552,660	590,922	600,204	609,975	615,878	622,146	628,430	634,679	641,065	646,689	652,361
Scenario 1	552,660	590,763	599,828	609,893	615,801	622,049	628,346	634,604	640,993	646,619	652,294
Scenario 2	552,660	590,978	600,685	610,526	616,405	622,649	627,914	634,567	641,120	646,585	652,294
Scenario 3	552,660	595,621	605,265	613,687	620,009	626,088	631,198	637,860	644,608	649,976	655,806
Impact of Scenario 1 (%)	0.00	-0.03	-0.06	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01
Impact of Scenario 2 (%)	0.00	0.01	0.08	0.09	0.09	0.08	-0.08	-0.02	0.01	-0.02	-0.01
Impact of Scenario 3 (%)	0.00	0.80	0.84	0.61	0.67	0.63	0.44	0.50	0.55	0.51	0.53
Corn Production											
Baseline	607,118	631,562	645,579	657,974	666,269	675,913	684,641	693,118	701,355	708,621	717,048
Scenario 1	607,118	631,567	645,658	658,033	666,354	675,979	684,720	693,178	701,426	708,681	717,113
Scenario 2	607,118	631,702	645,584	657,964	666,190	675,845	684,359	693,099	701,142	708,570	716,836
Scenario 3	607,118	633,717	645,592	659,194	666,552	676,927	684,864	694,167	701,799	709,625	717,602
Impact of Scenario 1 (%)	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Impact of Scenario 2 (%)	0.00	0.02	0.00	0.00	-0.01	-0.01	-0.04	0.00	-0.03	-0.01	-0.03
Impact of Scenario 3 (%)	0.00	0.34	0.00	0.19	0.04	0.15	0.03	0.15	0.06	0.14	0.08
Barley Production											
Baseline	139,652	147,442	147,835	148,227	149,616	150,742	151,975	153,151	154,420	155,838	157,310
Scenario 1	139,652	147,390	147,752	148,208	149,572	150,706	151,936	153,114	154,381	155,798	157,272
Scenario 2	139,652	147,483	148,210	148,566	150,044	151,173	151,945	153,376	154,574	156,000	157,448
Scenario 3	139,652	149,294	149,517	150,165	151,608	152,835	153,425	154,944	156,129	157,577	159,029
Impact of Scenario 1 (%)	0.00	-0.04	-0.06	-0.01	-0.03	-0.02	-0.03	-0.02	-0.02	-0.03	-0.02
Impact of Scenario 2 (%)	0.00	0.03	0.25	0.23	0.29	0.29	-0.02	0.15	0.10	0.10	0.09
Impact of Scenario 3 (%)	0.00	1.26	1.14	1.31	1.33	1.39	0.95	1.17	1.11	1.12	1.09

Table B.14. Impacts of EU Enlargement on Grain Production (continued)

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Czech Republic											
Wheat Production					(Thousand Metric Ton)						
Baseline	2,600	3,366	3,559	3,643	3,700	3,790	3,877	3,972	4,080	4,183	4,288
Scenario 1	2,600	3,342	3,435	3,527	3,593	3,687	3,780	3,878	3,987	4,091	4,197
Scenario 2	2,600	3,442	3,866	3,951	4,034	4,110	3,977	4,057	4,156	4,250	4,345
Scenario 3	2,600	3,863	4,422	4,509	4,593	4,669	4,511	4,618	4,751	4,879	5,009
Impact of Scenario 1 (%)	0.00	-0.71	-3.49	-3.17	-2.90	-2.70	-2.51	-2.37	-2.28	-2.21	-2.13
Impact of Scenario 2 (%)	0.00	2.24	8.62	8.47	9.03	8.45	2.59	2.12	1.87	1.60	1.34
Impact of Scenario 3 (%)	0.00	14.76	24.25	23.77	24.14	23.19	16.37	16.24	16.46	16.65	16.83
Corn Production											
Baseline	435	543	500	489	485	485	513	530	530	531	533
Scenario 1	435	545	511	500	496	496	524	541	540	541	543
Scenario 2	435	549	524	516	514	513	536	552	552	554	556
Scenario 3	435	604	582	576	577	580	609	630	634	641	647
Impact of Scenario 1 (%)	0.00	0.25	2.14	2.35	2.35	2.25	2.06	1.95	1.92	1.92	1.90
Impact of Scenario 2 (%)	0.00	0.95	4.73	5.52	5.94	5.94	4.49	4.03	4.18	4.30	4.29
Impact of Scenario 3 (%)	0.00	11.22	16.29	17.95	19.07	19.67	18.54	18.78	19.73	20.64	21.41
Barley Production											
Baseline	2,070	2,023	2,363	2,382	2,383	2,428	2,427	2,417	2,425	2,439	2,450
Scenario 1	2,070	2,012	2,297	2,320	2,324	2,373	2,376	2,369	2,379	2,394	2,406
Scenario 2	2,070	2,039	2,472	2,577	2,596	2,660	2,531	2,489	2,493	2,494	2,497
Scenario 3	2,070	2,236	2,754	2,878	2,896	2,959	2,810	2,768	2,779	2,790	2,801
Impact of Scenario 1 (%)	0.00	-0.57	-2.81	-2.61	-2.47	-2.24	-2.10	-1.99	-1.90	-1.85	-1.78
Impact of Scenario 2 (%)	0.00	0.78	4.61	8.18	8.97	9.57	4.31	2.97	2.79	2.28	1.91
Impact of Scenario 3 (%)	0.00	10.53	16.56	20.80	21.53	21.86	15.77	14.50	14.61	14.38	14.33
Hungary											
Wheat Production					(Thousand Metric Ton)						
Baseline	2,900	3,788	3,786	3,794	3,791	3,816	3,842	3,863	3,896	3,926	3,956
Scenario 1	2,900	3,751	3,675	3,673	3,675	3,701	3,729	3,754	3,788	3,819	3,851
Scenario 2	2,900	3,850	4,065	4,122	4,154	4,191	4,018	3,996	4,023	4,045	4,066
Scenario 3	2,900	4,692	5,094	5,222	5,310	5,405	5,218	5,226	5,301	5,369	5,434
Impact of Scenario 1 (%)	0.00	-0.97	-2.93	-3.18	-3.07	-3.01	-2.94	-2.83	-2.76	-2.71	-2.64
Impact of Scenario 2 (%)	0.00	1.64	7.36	8.63	9.58	9.82	4.58	3.43	3.27	3.05	2.79
Impact of Scenario 3 (%)	0.00	23.87	34.55	37.65	40.08	41.64	35.82	35.26	36.07	36.77	37.38
Corn Production											
Baseline	4,600	5,540	5,128	5,020	5,279	5,393	5,458	5,501	5,544	5,589	5,635
Scenario 1	4,600	5,529	5,156	5,050	5,310	5,425	5,492	5,536	5,581	5,627	5,674
Scenario 2	4,600	5,614	5,368	5,307	5,589	5,718	5,745	5,784	5,838	5,887	5,930
Scenario 3	4,600	6,930	6,799	6,823	7,265	7,513	7,615	7,737	7,882	8,021	8,151
Impact of Scenario 1 (%)	0.00	-0.20	0.54	0.61	0.59	0.58	0.62	0.64	0.65	0.68	0.69
Impact of Scenario 2 (%)	0.00	1.35	4.67	5.72	5.87	6.01	5.25	5.14	5.30	5.34	5.24
Impact of Scenario 3 (%)	0.00	25.10	32.58	35.93	37.62	39.30	39.52	40.65	42.17	43.52	44.65
Barley Production											
Baseline	830	839	934	932	935	934	938	935	938	942	945
Scenario 1	830	829	900	900	904	904	908	907	911	916	919
Scenario 2	830	849	995	1,017	1,023	1,028	984	973	977	977	976
Scenario 3	830	1,043	1,276	1,317	1,332	1,348	1,295	1,286	1,297	1,304	1,310
Impact of Scenario 1 (%)	0.00	-1.27	-3.70	-3.46	-3.36	-3.22	-3.13	-2.98	-2.88	-2.82	-2.73
Impact of Scenario 2 (%)	0.00	1.18	6.50	9.11	9.38	10.04	4.91	4.09	4.14	3.70	3.32
Impact of Scenario 3 (%)	0.00	24.27	36.61	41.29	42.50	44.25	38.12	37.59	38.34	38.44	38.59

Table B.14. Impacts of EU Enlargement on Grain Production (continued)

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Other NMS											
Wheat Production						(Thousand Metric Ton)					
Baseline	2,615	3,246	3,223	3,197	3,180	3,187	3,196	3,207	3,219	3,227	3,237
Scenario 1	2,615	3,198	3,005	2,989	2,981	2,990	3,002	3,015	3,031	3,041	3,054
Scenario 2	2,615	3,278	3,512	3,550	3,589	3,619	3,469	3,492	3,515	3,513	3,513
Scenario 3	2,615	4,141	4,847	4,944	5,041	5,126	4,950	5,017	5,082	5,115	5,150
Impact of Scenario 1 (%)	0.00	-1.48	-6.76	-6.50	-6.28	-6.18	-6.09	-5.98	-5.86	-5.76	-5.66
Impact of Scenario 2 (%)	0.00	0.99	8.98	11.05	12.85	13.54	8.53	8.91	9.17	8.86	8.53
Impact of Scenario 3 (%)	0.00	27.58	50.40	54.66	58.52	60.82	54.86	56.46	57.87	58.51	59.09
Corn Production											
Baseline	1,010	1,116	1,093	1,081	1,079	1,078	1,083	1,092	1,102	1,114	1,128
Scenario 1	1,010	1,124	1,147	1,160	1,172	1,180	1,190	1,202	1,213	1,226	1,239
Scenario 2	1,010	1,139	1,132	1,126	1,123	1,120	1,106	1,101	1,100	1,107	1,117
Scenario 3	1,010	1,470	1,494	1,509	1,523	1,533	1,524	1,526	1,533	1,550	1,572
Impact of Scenario 1 (%)	0.00	0.64	4.95	7.33	8.68	9.46	9.88	10.05	10.06	9.99	9.85
Impact of Scenario 2 (%)	0.00	1.99	3.61	4.20	4.13	3.89	2.10	0.77	-0.22	-0.71	-1.03
Impact of Scenario 3 (%)	0.00	31.63	36.70	39.63	41.19	42.21	40.68	39.67	39.05	39.08	39.30
Barley Production											
Baseline	2,210	2,325	2,448	2,455	2,522	2,550	2,568	2,577	2,583	2,589	2,592
Scenario 1	2,210	2,302	2,353	2,336	2,389	2,412	2,428	2,437	2,444	2,452	2,456
Scenario 2	2,210	2,373	2,792	2,999	3,178	3,282	3,189	3,155	3,150	3,137	3,120
Scenario 3	2,210	3,358	4,328	4,821	5,181	5,383	5,234	5,170	5,146	5,111	5,071
Impact of Scenario 1 (%)	0.00	-0.98	-3.88	-4.85	-5.27	-5.42	-5.47	-5.44	-5.38	-5.32	-5.23
Impact of Scenario 2 (%)	0.00	2.05	14.05	22.15	25.98	28.72	24.17	22.41	21.92	21.13	20.40
Impact of Scenario 3 (%)	0.00	44.42	76.77	96.37	105.40	111.10	103.82	100.61	99.22	97.38	95.67
Poland											
Wheat Production						(Thousand Metric Ton)					
Baseline	7,900	8,871	9,732	9,646	9,553	9,576	9,602	9,629	9,658	9,675	9,707
Scenario 1	7,900	8,811	9,380	9,324	9,252	9,281	9,313	9,347	9,386	9,409	9,448
Scenario 2	7,900	8,759	9,257	9,281	9,322	9,377	8,983	9,041	9,098	9,113	9,141
Scenario 3	7,900	11,334	12,625	12,616	12,645	12,704	12,153	12,211	12,268	12,269	12,294
Impact of Scenario 1 (%)	0.00	-0.68	-3.61	-3.34	-3.15	-3.08	-3.01	-2.93	-2.82	-2.74	-2.67
Impact of Scenario 2 (%)	0.00	-1.26	-4.88	-3.78	-2.42	-2.08	-6.45	-6.10	-5.80	-5.81	-5.83
Impact of Scenario 3 (%)	0.00	27.76	29.73	30.79	32.37	32.67	26.57	26.82	27.02	26.81	26.65
Corn Production											
Baseline	1,900	2,130	1,812	1,809	1,836	1,979	1,997	2,014	2,030	2,047	2,065
Scenario 1	1,900	2,137	1,847	1,839	1,864	2,008	2,027	2,044	2,060	2,076	2,095
Scenario 2	1,900	2,168	1,995	1,990	2,018	2,167	2,083	2,103	2,121	2,134	2,148
Scenario 3	1,900	2,486	2,320	2,328	2,378	2,569	2,486	2,525	2,562	2,593	2,625
Impact of Scenario 1 (%)	0.00	0.35	1.95	1.62	1.57	1.47	1.48	1.48	1.44	1.43	1.41
Impact of Scenario 2 (%)	0.00	1.81	10.11	9.98	9.95	9.51	4.28	4.41	4.47	4.25	4.01
Impact of Scenario 3 (%)	0.00	16.73	28.06	28.67	29.53	29.83	24.45	25.37	26.17	26.66	27.10
Barley Production											
Baseline	2,800	3,048	3,331	3,352	3,386	3,413	3,456	3,494	3,534	3,573	3,613
Scenario 1	2,800	3,036	3,270	3,300	3,336	3,366	3,409	3,449	3,490	3,530	3,572
Scenario 2	2,800	3,018	3,351	3,439	3,494	3,547	3,434	3,460	3,509	3,535	3,565
Scenario 3	2,800	3,485	3,936	4,065	4,154	4,243	4,129	4,179	4,256	4,308	4,365
Impact of Scenario 1 (%)	0.00	-0.37	-1.81	-1.56	-1.47	-1.39	-1.36	-1.31	-1.24	-1.21	-1.15
Impact of Scenario 2 (%)	0.00	-0.97	0.61	2.59	3.17	3.91	-0.65	-0.99	-0.71	-1.08	-1.33
Impact of Scenario 3 (%)	0.00	14.34	18.19	21.28	22.68	24.31	19.47	19.60	20.44	20.57	20.81

Table B.15. Impacts of EU Enlargement on Grain Consumption

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
European Union 15											
Wheat Consumption					(Thousand Metric Ton)						
Baseline	94,500	95,055	95,054	95,558	95,769	96,282	96,490	96,927	96,961	97,473	97,719
Scenario 1	94,500	95,046	95,045	95,556	95,767	96,276	96,484	96,923	96,958	97,469	97,715
Scenario 2	94,500	95,055	95,056	95,562	95,769	96,282	96,481	96,922	96,964	97,469	97,715
Scenario 3	94,500	95,100	95,103	95,570	95,786	96,316	96,510	96,942	96,989	97,498	97,738
Impact of Scenario 1 (%)	0.00	-0.01	-0.01	0.00	0.00	-0.01	-0.01	0.00	0.00	0.00	0.00
Impact of Scenario 2 (%)	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00
Impact of Scenario 3 (%)	0.00	0.05	0.05	0.01	0.02	0.03	0.02	0.02	0.03	0.03	0.02
Corn Consumption											
Baseline	37,200	40,150	41,218	41,670	42,007	42,352	42,526	42,619	43,007	43,071	43,325
Scenario 1	37,200	40,151	41,219	41,669	42,007	42,353	42,527	42,619	43,007	43,071	43,325
Scenario 2	37,200	40,149	41,215	41,668	42,006	42,350	42,527	42,618	43,004	43,066	43,319
Scenario 3	37,200	40,136	41,211	41,672	42,005	42,341	42,523	42,618	43,001	43,065	43,322
Impact of Scenario 1 (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact of Scenario 2 (%)	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01
Impact of Scenario 3 (%)	0.00	-0.03	-0.02	0.01	-0.01	-0.02	-0.01	0.00	-0.01	-0.01	-0.01
Barley Consumption											
Baseline	48,100	47,206	47,074	47,376	47,550	47,894	47,984	48,132	48,323	48,495	48,699
Scenario 1	48,100	47,202	47,067	47,372	47,546	47,891	47,980	48,128	48,320	48,491	48,695
Scenario 2	48,100	47,212	47,090	47,392	47,565	47,910	47,989	48,140	48,321	48,487	48,689
Scenario 3	48,100	47,254	47,130	47,427	47,598	47,949	48,025	48,177	48,371	48,543	48,746
Impact of Scenario 1 (%)	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Impact of Scenario 2 (%)	0.00	0.01	0.04	0.03	0.03	0.03	0.01	0.02	0.00	-0.02	-0.02
Impact of Scenario 3 (%)	0.00	0.10	0.12	0.11	0.10	0.11	0.09	0.09	0.10	0.10	0.10
World											
Wheat Consumption					(Thousand Metric Ton)						
Baseline	590,839	596,796	602,433	610,300	616,172	622,450	627,990	633,398	639,858	646,332	651,916
Scenario 1	590,839	596,845	602,243	610,167	616,066	622,342	627,890	633,306	639,770	646,248	651,836
Scenario 2	590,839	596,860	602,687	610,700	616,627	622,922	627,986	633,300	639,883	646,270	651,880
Scenario 3	590,839	598,935	606,292	613,886	620,129	626,338	631,406	636,614	643,354	649,685	655,386
Impact of Scenario 1 (%)	0.00	0.01	-0.03	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
Impact of Scenario 2 (%)	0.00	0.01	0.04	0.07	0.07	0.08	0.00	-0.02	0.00	-0.01	-0.01
Impact of Scenario 3 (%)	0.00	0.36	0.64	0.59	0.64	0.62	0.54	0.51	0.55	0.52	0.53
Corn Consumption											
Baseline	641,930	639,098	646,515	657,583	666,409	675,553	683,927	692,441	700,683	708,697	716,401
Scenario 1	641,930	639,134	646,600	657,641	666,486	675,620	684,000	692,505	700,751	708,759	716,464
Scenario 2	641,930	639,161	646,479	657,551	666,332	675,482	683,771	692,384	700,509	708,623	716,219
Scenario 3	641,930	640,260	646,716	658,509	666,849	676,417	684,406	693,341	701,243	709,599	717,046
Impact of Scenario 1 (%)	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Impact of Scenario 2 (%)	0.00	0.01	-0.01	0.00	-0.01	-0.01	-0.02	-0.01	-0.02	-0.01	-0.03
Impact of Scenario 3 (%)	0.00	0.18	0.03	0.14	0.07	0.13	0.07	0.13	0.08	0.13	0.09
Barley Consumption											
Baseline	145,612	145,791	147,012	147,981	149,317	150,564	151,691	152,926	154,210	155,567	157,005
Scenario 1	145,612	145,749	146,930	147,941	149,269	150,524	151,649	152,887	154,170	155,528	156,967
Scenario 2	145,612	145,859	147,341	148,343	149,743	151,004	151,789	153,122	154,367	155,717	157,137
Scenario 3	145,612	147,155	148,645	149,864	151,303	152,632	153,316	154,681	155,943	157,307	158,738
Impact of Scenario 1 (%)	0.00	-0.03	-0.06	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02
Impact of Scenario 2 (%)	0.00	0.05	0.22	0.24	0.29	0.29	0.06	0.13	0.10	0.10	0.08
Impact of Scenario 3 (%)	0.00	0.94	1.11	1.27	1.33	1.37	1.07	1.15	1.12	1.12	1.10

Table B.15. Impacts of EU Enlargement on Grain Consumption (continued)

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Czech Republic											
Wheat Consumption					(Thousand Metric Ton)						
Baseline	3,100	3,061	3,071	3,122	3,137	3,156	3,168	3,168	3,169	3,174	3,175
Scenario 1	3,100	3,128	3,127	3,173	3,185	3,201	3,210	3,209	3,210	3,214	3,215
Scenario 2	3,100	2,841	2,865	2,896	2,922	2,951	2,974	2,978	2,983	2,991	3,001
Scenario 3	3,100	2,848	2,872	2,902	2,928	2,956	2,979	2,983	2,988	2,995	3,006
Impact of Scenario 1 (%)	0.00	2.21	1.82	1.64	1.54	1.43	1.35	1.31	1.29	1.25	1.25
Impact of Scenario 2 (%)	0.00	-7.17	-6.70	-7.21	-6.84	-6.50	-6.12	-5.99	-5.88	-5.78	-5.48
Impact of Scenario 3 (%)	0.00	-6.95	-6.49	-7.02	-6.66	-6.33	-5.96	-5.83	-5.72	-5.63	-5.33
Corn Consumption											
Baseline	450	511	530	562	586	610	630	651	669	686	702
Scenario 1	450	504	521	551	573	595	614	634	651	668	683
Scenario 2	450	502	518	546	566	586	604	622	638	653	668
Scenario 3	450	502	518	545	566	586	604	622	638	653	668
Impact of Scenario 1 (%)	0.00	-1.42	-1.74	-2.07	-2.27	-2.41	-2.50	-2.56	-2.63	-2.66	-2.69
Impact of Scenario 2 (%)	0.00	-1.75	-2.16	-2.99	-3.39	-3.82	-4.11	-4.37	-4.62	-4.77	-4.91
Impact of Scenario 3 (%)	0.00	-1.81	-2.21	-3.05	-3.45	-3.87	-4.16	-4.42	-4.67	-4.82	-4.96
Barley Consumption											
Baseline	1,900	1,544	1,461	1,395	1,389	1,390	1,402	1,406	1,406	1,408	1,414
Scenario 1	1,900	1,587	1,511	1,453	1,447	1,448	1,458	1,460	1,459	1,460	1,464
Scenario 2	1,900	1,563	1,453	1,389	1,371	1,373	1,386	1,393	1,401	1,408	1,416
Scenario 3	1,900	1,569	1,459	1,397	1,379	1,381	1,393	1,400	1,408	1,415	1,423
Impact of Scenario 1 (%)	0.00	2.74	3.43	4.13	4.16	4.13	3.96	3.83	3.75	3.65	3.52
Impact of Scenario 2 (%)	0.00	1.24	-0.56	-0.42	-1.34	-1.25	-1.18	-0.92	-0.39	-0.02	0.16
Impact of Scenario 3 (%)	0.00	1.59	-0.10	0.13	-0.77	-0.68	-0.63	-0.38	0.14	0.50	0.67
Hungary											
Wheat Consumption					(Thousand Metric Ton)						
Baseline	2,800	2,962	3,008	3,073	3,110	3,145	3,171	3,191	3,205	3,220	3,231
Scenario 1	2,800	3,055	3,104	3,164	3,200	3,234	3,256	3,273	3,285	3,298	3,308
Scenario 2	2,800	2,810	2,837	2,878	2,912	2,944	2,981	3,007	3,027	3,047	3,070
Scenario 3	2,800	2,816	2,843	2,884	2,918	2,950	2,987	3,013	3,032	3,052	3,075
Impact of Scenario 1 (%)	0.00	3.14	3.19	2.96	2.88	2.83	2.66	2.58	2.51	2.43	2.38
Impact of Scenario 2 (%)	0.00	-5.12	-5.70	-6.35	-6.38	-6.40	-5.99	-5.75	-5.55	-5.37	-4.99
Impact of Scenario 3 (%)	0.00	-4.94	-5.51	-6.15	-6.19	-6.22	-5.81	-5.58	-5.39	-5.21	-4.84
Corn Consumption											
Baseline	4,100	3,944	3,893	3,937	3,990	4,060	4,073	4,108	4,117	4,122	4,130
Scenario 1	4,100	3,939	3,893	3,936	3,990	4,059	4,070	4,104	4,111	4,116	4,123
Scenario 2	4,100	3,805	3,721	3,747	3,792	3,853	3,868	3,903	3,909	3,918	3,928
Scenario 3	4,100	3,805	3,721	3,746	3,792	3,853	3,868	3,903	3,909	3,918	3,928
Impact of Scenario 1 (%)	0.00	-0.13	-0.01	-0.01	-0.01	-0.04	-0.09	-0.10	-0.14	-0.14	-0.19
Impact of Scenario 2 (%)	0.00	-3.54	-4.41	-4.83	-4.96	-5.10	-5.04	-5.00	-5.04	-4.95	-4.89
Impact of Scenario 3 (%)	0.00	-3.54	-4.41	-4.83	-4.96	-5.10	-5.04	-5.00	-5.04	-4.95	-4.89
Barley Consumption											
Baseline	850	525	428	394	393	395	411	423	432	442	455
Scenario 1	850	573	490	462	461	465	479	489	497	505	516
Scenario 2	850	504	374	329	316	314	333	349	364	379	395
Scenario 3	850	507	378	334	321	320	339	354	369	384	400
Impact of Scenario 1 (%)	0.00	9.13	14.35	17.12	17.52	17.76	16.51	15.68	15.08	14.37	13.51
Impact of Scenario 2 (%)	0.00	-4.04	-12.80	-16.61	-19.59	-20.31	-18.86	-17.50	-15.70	-14.27	-13.20
Impact of Scenario 3 (%)	0.00	-3.40	-11.72	-15.31	-18.22	-18.91	-17.56	-16.25	-14.51	-13.13	-12.13

Table B.15. Impacts of EU Enlargement on Grain Consumption (continued)

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Other NMS											
Wheat Consumption						(Thousand Metric Ton)					
Baseline	3,809	3,857	3,994	4,152	4,236	4,324	4,396	4,449	4,500	4,560	4,613
Scenario 1	3,809	4,020	4,180	4,339	4,423	4,510	4,581	4,631	4,680	4,736	4,789
Scenario 2	3,809	3,895	4,013	4,126	4,195	4,274	4,347	4,403	4,456	4,514	4,580
Scenario 3	3,809	3,896	4,014	4,127	4,196	4,275	4,348	4,404	4,457	4,515	4,580
Impact of Scenario 1 (%)	0.00	4.21	4.65	4.50	4.42	4.31	4.21	4.09	3.99	3.87	3.82
Impact of Scenario 2 (%)	0.00	0.98	0.46	-0.65	-0.96	-1.14	-1.12	-1.03	-0.99	-0.99	-0.73
Impact of Scenario 3 (%)	0.00	1.01	0.49	-0.62	-0.94	-1.12	-1.09	-1.01	-0.97	-0.98	-0.72
Corn Consumption											
Baseline	1,610	1,799	1,941	2,054	2,111	2,169	2,215	2,246	2,273	2,305	2,337
Scenario 1	1,610	1,760	1,897	2,008	2,064	2,121	2,166	2,198	2,225	2,257	2,288
Scenario 2	1,610	1,761	1,898	2,006	2,062	2,117	2,161	2,191	2,216	2,248	2,278
Scenario 3	1,610	1,760	1,897	2,006	2,062	2,117	2,160	2,190	2,215	2,247	2,278
Impact of Scenario 1 (%)	0.00	-2.17	-2.27	-2.27	-2.24	-2.22	-2.21	-2.16	-2.15	-2.10	-2.09
Impact of Scenario 2 (%)	0.00	-2.13	-2.19	-2.33	-2.32	-2.38	-2.43	-2.45	-2.52	-2.50	-2.51
Impact of Scenario 3 (%)	0.00	-2.16	-2.23	-2.37	-2.36	-2.41	-2.47	-2.49	-2.56	-2.53	-2.54
Barley Consumption											
Baseline	2,732	2,877	3,096	3,250	3,337	3,417	3,479	3,518	3,545	3,584	3,629
Scenario 1	2,732	2,898	3,117	3,274	3,361	3,441	3,503	3,541	3,569	3,607	3,650
Scenario 2	2,732	2,743	2,907	3,064	3,138	3,219	3,282	3,324	3,360	3,403	3,445
Scenario 3	2,732	2,747	2,911	3,068	3,143	3,223	3,286	3,328	3,364	3,408	3,449
Impact of Scenario 1 (%)	0.00	0.72	0.68	0.76	0.70	0.70	0.68	0.66	0.65	0.64	0.58
Impact of Scenario 2 (%)	0.00	-4.65	-6.11	-5.72	-5.96	-5.79	-5.66	-5.51	-5.23	-5.05	-5.07
Impact of Scenario 3 (%)	0.00	-4.54	-5.99	-5.60	-5.84	-5.66	-5.55	-5.39	-5.12	-4.94	-4.95
Poland											
Wheat Consumption						(Thousand Metric Ton)					
Baseline	8,750	8,519	8,250	8,567	8,699	8,765	8,818	8,876	8,947	9,034	9,098
Scenario 1	8,750	8,737	8,475	8,791	8,920	8,982	9,028	9,079	9,144	9,225	9,286
Scenario 2	8,750	8,998	8,724	8,986	9,094	9,142	9,185	9,240	9,303	9,382	9,454
Scenario 3	8,750	9,007	8,735	8,997	9,106	9,154	9,196	9,250	9,313	9,392	9,463
Impact of Scenario 1 (%)	0.00	2.56	2.72	2.62	2.54	2.47	2.39	2.29	2.20	2.11	2.06
Impact of Scenario 2 (%)	0.00	5.62	5.74	4.89	4.55	4.31	4.17	4.09	3.98	3.86	3.91
Impact of Scenario 3 (%)	0.00	5.73	5.88	5.03	4.68	4.43	4.30	4.21	4.09	3.97	4.02
Corn Consumption											
Baseline	2,000	2,045	1,916	2,103	2,182	2,216	2,244	2,279	2,318	2,366	2,404
Scenario 1	2,000	2,033	1,904	2,091	2,170	2,204	2,231	2,266	2,305	2,353	2,391
Scenario 2	2,000	1,987	1,851	2,027	2,102	2,135	2,162	2,197	2,236	2,284	2,324
Scenario 3	2,000	1,987	1,851	2,027	2,103	2,135	2,163	2,198	2,236	2,285	2,325
Impact of Scenario 1 (%)	0.00	-0.61	-0.59	-0.58	-0.57	-0.57	-0.58	-0.56	-0.56	-0.55	-0.55
Impact of Scenario 2 (%)	0.00	-2.88	-3.38	-3.63	-3.65	-3.67	-3.65	-3.57	-3.52	-3.43	-3.33
Impact of Scenario 3 (%)	0.00	-2.86	-3.37	-3.61	-3.63	-3.66	-3.64	-3.56	-3.51	-3.42	-3.32
Barley Consumption											
Baseline	3,300	3,029	2,832	3,048	3,154	3,202	3,244	3,293	3,346	3,412	3,471
Scenario 1	3,300	3,045	2,851	3,067	3,172	3,220	3,261	3,309	3,361	3,426	3,483
Scenario 2	3,300	3,097	2,879	3,100	3,195	3,244	3,286	3,338	3,396	3,464	3,521
Scenario 3	3,300	3,101	2,884	3,105	3,201	3,249	3,292	3,342	3,400	3,469	3,526
Impact of Scenario 1 (%)	0.00	0.51	0.65	0.64	0.58	0.56	0.52	0.47	0.44	0.41	0.35
Impact of Scenario 2 (%)	0.00	2.24	1.67	1.71	1.31	1.31	1.31	1.35	1.49	1.53	1.44
Impact of Scenario 3 (%)	0.00	2.38	1.84	1.88	1.48	1.48	1.47	1.50	1.63	1.67	1.57

Table B.16. Impacts of EU Enlargement on Grain Net Trade

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
European Union 15											
Wheat Net Trade						(Thousand Metric Ton)					
Baseline	2,000	6,945	6,266	7,275	7,659	8,391	8,883	9,018	9,309	9,415	9,479
Scenario 1	2,000	6,968	6,297	7,306	7,690	8,419	8,910	9,047	9,337	9,442	9,506
Scenario 2	2,000	6,941	6,246	7,241	7,618	8,348	8,871	9,004	9,298	9,404	9,466
Scenario 3	2,000	6,812	6,079	7,058	7,431	8,167	8,690	8,811	9,100	9,203	9,259
Impact of Scenario 1 (%)	0.00	0.33	0.50	0.43	0.39	0.33	0.31	0.31	0.30	0.29	0.29
Impact of Scenario 2 (%)	0.00	-0.05	-0.31	-0.46	-0.54	-0.51	-0.13	-0.15	-0.12	-0.12	-0.14
Impact of Scenario 3 (%)	0.00	-1.92	-2.99	-2.97	-2.98	-2.67	-2.17	-2.30	-2.25	-2.25	-2.33
Corn Net Trade											
Baseline	-3,900	-3,299	-3,388	-3,397	-3,430	-3,515	-3,555	-3,592	-3,592	-3,627	-3,592
Scenario 1	-3,900	-3,299	-3,389	-3,398	-3,430	-3,516	-3,556	-3,593	-3,593	-3,627	-3,593
Scenario 2	-3,900	-3,299	-3,387	-3,396	-3,428	-3,514	-3,555	-3,592	-3,591	-3,625	-3,591
Scenario 3	-3,900	-3,295	-3,383	-3,392	-3,425	-3,511	-3,551	-3,588	-3,587	-3,622	-3,587
Impact of Scenario 1 (%)	0.00	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01
Impact of Scenario 2 (%)	0.00	-0.01	-0.03	-0.04	-0.04	-0.03	0.00	-0.01	-0.02	-0.04	-0.04
Impact of Scenario 3 (%)	0.00	-0.13	-0.16	-0.16	-0.13	-0.12	-0.11	-0.14	-0.13	-0.13	-0.16
Barley Net Trade											
Baseline	2,150	2,492	2,965	3,273	3,475	3,753	4,035	4,331	4,566	4,806	5,001
Scenario 1	2,150	2,505	2,981	3,289	3,491	3,768	4,050	4,346	4,581	4,821	5,016
Scenario 2	2,150	2,481	2,928	3,233	3,426	3,703	4,012	4,298	4,541	4,781	4,977
Scenario 3	2,150	2,374	2,831	3,112	3,305	3,573	3,889	4,165	4,405	4,639	4,831
Impact of Scenario 1 (%)	0.00	0.52	0.56	0.47	0.46	0.40	0.37	0.35	0.33	0.32	0.30
Impact of Scenario 2 (%)	0.00	-0.45	-1.23	-1.22	-1.41	-1.34	-0.58	-0.76	-0.55	-0.52	-0.48
Impact of Scenario 3 (%)	0.00	-4.72	-4.52	-4.94	-4.90	-4.79	-3.61	-3.82	-3.52	-3.47	-3.41
World											
Wheat Net Trade						(Thousand Metric Ton)					
Baseline	156,602	166,630	179,555	188,133	194,085	199,971	204,806	208,985	213,534	216,854	220,805
Scenario 1	156,602	166,190	179,165	187,757	193,497	199,385	204,245	208,435	212,992	216,316	220,278
Scenario 2	156,602	167,694	180,709	189,661	195,691	201,596	205,671	209,845	214,405	217,677	221,623
Scenario 3	156,602	170,284	185,217	194,168	200,590	206,506	210,045	214,265	219,004	222,237	226,250
Impact of Scenario 1 (%)	0.00	-0.26	-0.22	-0.20	-0.30	-0.29	-0.27	-0.26	-0.25	-0.25	-0.24
Impact of Scenario 2 (%)	0.00	0.64	0.64	0.81	0.83	0.81	0.42	0.41	0.41	0.38	0.37
Impact of Scenario 3 (%)	0.00	2.19	3.15	3.21	3.35	3.27	2.56	2.53	2.56	2.48	2.47
Corn Net Trade											
Baseline	146,878	148,076	149,516	155,297	160,066	164,337	168,573	172,157	175,178	178,453	181,750
Scenario 1	146,878	148,102	149,520	155,274	160,033	164,279	168,516	172,087	175,110	178,380	181,677
Scenario 2	146,878	148,078	149,451	155,014	159,709	164,016	168,381	172,144	175,085	178,466	181,684
Scenario 3	146,878	147,851	148,946	154,968	159,211	163,938	167,991	172,047	174,781	178,341	181,412
Impact of Scenario 1 (%)	0.00	0.02	0.00	-0.01	-0.02	-0.04	-0.03	-0.04	-0.04	-0.04	-0.04
Impact of Scenario 2 (%)	0.00	0.00	-0.04	-0.18	-0.22	-0.19	-0.11	-0.01	-0.05	0.01	-0.04
Impact of Scenario 3 (%)	0.00	-0.15	-0.38	-0.21	-0.53	-0.24	-0.34	-0.06	-0.23	-0.06	-0.19
Barley Net Trade											
Baseline	24,695	25,284	27,101	27,755	28,635	29,285	29,963	30,625	31,167	31,863	32,703
Scenario 1	24,695	25,473	27,450	28,159	29,041	29,693	30,364	31,017	31,552	32,241	33,069
Scenario 2	24,695	25,051	26,137	26,357	27,068	27,592	28,486	29,363	29,932	30,699	31,574
Scenario 3	24,695	24,010	24,726	24,752	25,257	25,857	26,592	27,380	27,886	28,606	29,411
Impact of Scenario 1 (%)	0.00	0.75	1.29	1.45	1.42	1.39	1.34	1.28	1.23	1.19	1.12
Impact of Scenario 2 (%)	0.00	-0.92	-3.55	-5.04	-5.47	-5.78	-4.93	-4.12	-3.96	-3.65	-3.45
Impact of Scenario 3 (%)	0.00	-5.04	-8.76	-10.82	-11.79	-11.71	-11.25	-10.60	-10.53	-10.22	-10.06

Table B.16. Impacts of EU Enlargement on Grain Net Trade (continued)

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Czech Republic											
Wheat Net Trade						(Thousand Metric Ton)					
Baseline	-200	327	450	476	527	602	682	794	901	1,001	1,107
Scenario 1	-200	197	263	311	374	457	545	660	769	869	977
Scenario 2	-200	744	1,004	1,031	1,078	1,122	968	1,062	1,160	1,248	1,332
Scenario 3	-200	1,154	1,552	1,582	1,631	1,675	1,498	1,618	1,750	1,872	1,991
Impact of Scenario 1 (%)	0.00	-39.72	-41.47	-34.69	-29.09	-24.09	-20.15	-16.90	-14.71	-13.14	-11.76
Impact of Scenario 2 (%)	0.00	127.45	123.09	116.31	104.55	86.34	41.89	33.80	28.62	24.67	20.32
Impact of Scenario 3 (%)	0.00	252.74	245.09	232.00	209.63	178.32	119.47	103.85	94.13	87.08	79.90
Corn Net Trade											
Baseline	90	43	-29	-75	-102	-126	-117	-121	-139	-155	-169
Scenario 1	90	53	-10	-52	-78	-100	-91	-94	-111	-127	-140
Scenario 2	90	61	6	-31	-53	-74	-68	-71	-86	-100	-112
Scenario 3	90	117	64	30	10	-7	4	8	-3	-13	-21
Impact of Scenario 1 (%)	0.00	22.15	-67.57	-30.94	-24.12	-20.36	-22.45	-22.36	-19.94	-18.31	-17.16
Impact of Scenario 2 (%)	0.00	41.08	-121.31	-59.05	-47.64	-41.33	-41.63	-41.22	-38.09	-35.76	-33.81
Impact of Scenario 3 (%)	0.00	170.41	-318.87	-140.82	-110.25	-94.55	-103.39	-106.25	-97.52	-91.92	-87.85
Barley Net Trade											
Baseline	275	494	903	986	990	1,034	1,022	1,010	1,018	1,030	1,035
Scenario 1	275	438	786	866	873	923	915	908	919	933	942
Scenario 2	275	494	1,024	1,188	1,223	1,284	1,142	1,094	1,091	1,085	1,079
Scenario 3	275	685	1,299	1,481	1,515	1,574	1,413	1,365	1,370	1,373	1,376
Impact of Scenario 1 (%)	0.00	-11.30	-12.97	-12.17	-11.78	-10.80	-10.41	-10.07	-9.68	-9.37	-9.02
Impact of Scenario 2 (%)	0.00	-0.10	13.42	20.50	23.57	24.13	11.81	8.36	7.12	5.37	4.29
Impact of Scenario 3 (%)	0.00	38.64	43.94	50.22	53.02	52.21	38.30	35.21	34.54	33.32	32.98
Hungary											
Wheat Net Trade						(Thousand Metric Ton)					
Baseline	450	828	757	704	673	667	659	668	686	700	720
Scenario 1	450	663	550	494	468	464	463	477	498	517	539
Scenario 2	450	1,102	1,217	1,232	1,235	1,243	1,020	981	989	991	988
Scenario 3	450	1,936	2,241	2,327	2,386	2,452	2,215	2,206	2,261	2,310	2,351
Impact of Scenario 1 (%)	0.00	-19.91	-27.35	-29.74	-30.43	-30.48	-29.67	-28.57	-27.32	-26.23	-25.10
Impact of Scenario 2 (%)	0.00	33.06	60.84	75.09	83.66	86.32	54.87	46.88	44.18	41.52	37.21
Impact of Scenario 3 (%)	0.00	133.79	196.01	230.68	254.73	267.47	236.19	230.15	229.70	229.83	226.56
Corn Net Trade											
Baseline	500	1,546	1,208	1,066	1,280	1,328	1,376	1,387	1,423	1,462	1,500
Scenario 1	500	1,535	1,233	1,097	1,312	1,361	1,414	1,427	1,466	1,506	1,548
Scenario 2	500	1,800	1,632	1,549	1,790	1,861	1,867	1,875	1,924	1,963	1,996
Scenario 3	500	3,116	3,063	3,066	3,466	3,656	3,737	3,828	3,968	4,097	4,217
Impact of Scenario 1 (%)	0.00	-0.74	2.10	2.91	2.47	2.52	2.78	2.85	3.00	3.04	3.15
Impact of Scenario 2 (%)	0.00	16.43	35.04	45.30	39.82	40.11	35.65	35.14	35.18	34.26	33.06
Impact of Scenario 3 (%)	0.00	101.50	153.51	187.53	170.77	175.31	171.57	175.94	178.83	180.25	181.10
Barley Net Trade											
Baseline	0	342	505	535	539	538	522	510	505	498	488
Scenario 1	0	274	407	435	439	438	426	416	413	409	401
Scenario 2	0	382	627	687	705	712	645	621	610	596	579
Scenario 3	0	572	904	982	1,009	1,026	951	929	926	918	907
Impact of Scenario 1 (%)	#DIV/0!	-19.91	-19.37	-18.67	-18.53	-18.58	-18.49	-18.40	-18.20	-18.01	-17.79
Impact of Scenario 2 (%)	#DIV/0!	11.65	24.29	28.36	30.82	32.32	23.49	21.87	20.91	19.47	18.62
Impact of Scenario 3 (%)	#DIV/0!	67.10	79.07	83.45	87.27	90.69	82.07	82.29	83.44	84.13	85.95

Table B.16. Impacts of EU Enlargement on Grain Net Trade (continued)

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Other NMS											
Wheat Net Trade					(Thousand Metric Ton)						
Baseline	-980	-663	-833	-1,023	-1,108	-1,178	-1,236	-1,273	-1,311	-1,362	-1,402
Scenario 1	-980	-958	-1,265	-1,425	-1,496	-1,561	-1,614	-1,644	-1,677	-1,722	-1,759
Scenario 2	-980	-612	-522	-608	-640	-690	-913	-944	-976	-1,035	-1,099
Scenario 3	-980	246	811	784	811	816	566	579	592	567	537
Impact of Scenario 1 (%)	0.00	44.58	51.83	39.30	35.05	32.48	30.56	29.17	27.90	26.42	25.49
Impact of Scenario 2 (%)	0.00	-7.73	-37.41	-40.57	-42.19	-41.46	-26.10	-25.79	-25.60	-24.04	-21.55
Impact of Scenario 3 (%)	0.00	-137.04	-197.30	-176.71	-173.19	-169.28	-145.83	-145.52	-145.12	-141.59	-138.29
Corn Net Trade											
Baseline	-600	-801	-898	-1,001	-1,048	-1,103	-1,144	-1,166	-1,184	-1,202	-1,219
Scenario 1	-600	-745	-798	-875	-907	-953	-988	-1,008	-1,024	-1,042	-1,059
Scenario 2	-600	-712	-806	-903	-952	-1,008	-1,067	-1,103	-1,129	-1,153	-1,173
Scenario 3	-600	-380	-444	-519	-551	-594	-648	-677	-695	-709	-717
Impact of Scenario 1 (%)	0.00	-6.93	-11.09	-12.62	-13.46	-13.63	-13.64	-13.56	-13.50	-13.27	-13.13
Impact of Scenario 2 (%)	0.00	-11.16	-10.26	-9.84	-9.14	-8.57	-6.74	-5.43	-4.64	-4.07	-3.80
Impact of Scenario 3 (%)	0.00	-52.50	-50.58	-48.17	-47.36	-46.10	-43.35	-41.92	-41.27	-41.03	-41.18
Barley Net Trade											
Baseline	-470	-542	-667	-807	-831	-879	-924	-952	-972	-1,005	-1,049
Scenario 1	-470	-623	-802	-962	-993	-1,044	-1,088	-1,115	-1,133	-1,165	-1,204
Scenario 2	-470	-282	-68	-39	51	65	-99	-180	-224	-282	-341
Scenario 3	-470	697	1,463	1,778	2,049	2,161	1,942	1,831	1,768	1,688	1,606
Impact of Scenario 1 (%)	0.00	14.96	20.28	19.24	19.47	18.77	17.84	17.13	16.60	15.88	14.74
Impact of Scenario 2 (%)	0.00	-48.01	-89.88	-95.16	-106.13	-107.39	-89.23	-81.09	-76.94	-71.92	-67.47
Impact of Scenario 3 (%)	0.00	-228.59	-319.28	-320.34	-346.60	-345.86	-310.27	-292.42	-281.93	-267.90	-253.04
Poland											
Wheat Net Trade					(Thousand Metric Ton)						
Baseline	-750	363	1,405	1,014	823	790	761	730	686	622	592
Scenario 1	-750	8	829	473	304	281	264	248	219	168	147
Scenario 2	-750	-371	480	264	209	219	-224	-221	-228	-286	-334
Scenario 3	-750	2,189	3,836	3,588	3,521	3,535	2,936	2,939	2,931	2,860	2,810
Impact of Scenario 1 (%)	0.00	-97.88	-40.99	-53.34	-63.05	-64.41	-65.33	-66.00	-68.01	-73.01	-75.21
Impact of Scenario 2 (%)	0.00	-202.21	-65.87	-73.94	-74.61	-72.24	-129.44	-130.28	-133.31	-146.02	-156.38
Impact of Scenario 3 (%)	0.00	503.27	172.96	253.79	327.87	347.62	285.84	302.57	327.41	359.41	375.02
Corn Net Trade											
Baseline	-20	122	-84	-284	-341	-235	-247	-266	-290	-322	-342
Scenario 1	-20	144	-36	-242	-300	-193	-205	-224	-248	-279	-299
Scenario 2	-20	232	173	-21	-75	37	-78	-95	-117	-153	-179
Scenario 3	-20	550	498	317	284	439	325	327	323	305	297
Impact of Scenario 1 (%)	0.00	18.47	-56.70	-14.87	-12.16	-17.84	-17.29	-16.01	-14.64	-13.15	-12.43
Impact of Scenario 2 (%)	0.00	91.13	-305.63	-92.67	-78.14	-115.95	-68.50	-64.24	-59.52	-52.27	-47.53
Impact of Scenario 3 (%)	0.00	352.00	-692.01	-211.56	-183.34	-286.92	-231.25	-222.54	-211.23	-194.79	-186.86
Barley Net Trade											
Baseline	-350	13	482	295	224	207	207	197	184	158	138
Scenario 1	-350	-18	402	223	157	142	144	136	125	101	85
Scenario 2	-350	-95	459	331	293	299	143	118	108	67	40
Scenario 3	-350	366	1,040	952	948	990	833	832	851	836	835
Impact of Scenario 1 (%)	0.00	-245.17	-16.51	-24.37	-30.15	-31.50	-30.68	-30.98	-31.80	-35.92	-38.73
Impact of Scenario 2 (%)	0.00	-857.47	-4.70	12.23	30.58	44.39	-31.18	-40.33	-41.11	-57.73	-71.27
Impact of Scenario 3 (%)	0.00	2,811.91	115.76	222.91	322.84	378.64	301.57	322.33	363.19	428.54	505.47

Table B.17. Impacts of EU Enlargement on World Wheat Trade

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Net Exporters											
Argentina						(Thousand Metric Tons)					
Baseline	7,490	6,787	9,078	10,818	11,891	12,495	13,014	13,373	13,698	13,998	14,299
Scenario 1	7,490	6,795	9,131	10,896	11,969	12,574	13,092	13,449	13,773	14,072	14,372
Scenario 2	7,490	6,794	9,105	10,818	11,869	12,461	12,973	13,383	13,713	14,008	14,317
Scenario 3	7,490	6,779	8,889	10,485	11,528	12,088	12,599	13,008	13,338	13,617	13,924
Impact of Scenario 1 (%)	0.00	0.13	0.58	0.72	0.66	0.63	0.60	0.57	0.55	0.53	0.51
Impact of Scenario 2 (%)	0.00	0.11	0.30	0.00	-0.18	-0.28	-0.31	0.08	0.11	0.07	0.13
Impact of Scenario 3 (%)	0.00	-0.11	-2.08	-3.08	-3.05	-3.26	-3.19	-2.73	-2.63	-2.72	-2.62
Australia											
Baseline	17,490	17,345	17,536	18,062	18,655	19,342	19,737	20,382	21,073	21,743	22,409
Scenario 1	17,490	17,368	17,586	18,122	18,714	19,399	19,793	20,437	21,127	21,796	22,461
Scenario 2	17,490	17,343	17,528	18,051	18,630	19,312	19,743	20,412	21,108	21,775	22,446
Scenario 3	17,490	17,222	17,297	17,756	18,327	18,995	19,426	20,090	20,774	21,424	22,082
Impact of Scenario 1 (%)	0.00	0.13	0.29	0.33	0.31	0.29	0.28	0.27	0.25	0.24	0.23
Impact of Scenario 2 (%)	0.00	-0.01	-0.04	-0.06	-0.13	-0.15	0.03	0.14	0.16	0.15	0.17
Impact of Scenario 3 (%)	0.00	-0.71	-1.36	-1.70	-1.76	-1.79	-1.57	-1.43	-1.42	-1.47	-1.46
Canada											
Baseline	15,850	15,328	16,456	17,473	18,104	18,916	19,653	20,043	20,724	21,178	21,706
Scenario 1	15,850	15,372	16,508	17,519	18,149	18,961	19,697	20,087	20,768	21,222	21,751
Scenario 2	15,850	15,330	16,464	17,494	18,117	18,936	19,717	20,083	20,772	21,220	21,755
Scenario 3	15,850	15,117	16,302	17,305	17,951	18,754	19,555	19,899	20,588	21,021	21,552
Impact of Scenario 1 (%)	0.00	0.29	0.32	0.26	0.25	0.24	0.23	0.22	0.21	0.21	0.21
Impact of Scenario 2 (%)	0.00	0.01	0.05	0.12	0.07	0.10	0.33	0.20	0.23	0.20	0.22
Impact of Scenario 3 (%)	0.00	-1.38	-0.93	-0.96	-0.85	-0.86	-0.50	-0.72	-0.66	-0.74	-0.71
Czech Republic											
Baseline	-200	327	450	476	527	602	682	794	901	1,001	1,107
Scenario 1	-200	197	263	311	374	457	545	660	769	869	977
Scenario 2	-200	744	1,004	1,031	1,078	1,122	968	1,062	1,160	1,248	1,332
Scenario 3	-200	1,154	1,552	1,582	1,631	1,675	1,498	1,618	1,750	1,872	1,991
Impact of Scenario 1 (%)	0.00	-39.72	-41.47	-34.69	-29.09	-24.09	-20.15	-16.90	-14.71	-13.14	-11.76
Impact of Scenario 2 (%)	0.00	127.45	123.09	116.31	104.55	86.34	41.89	33.80	28.62	24.67	20.32
Impact of Scenario 3 (%)	0.00	252.74	245.09	232.00	209.63	178.32	119.47	103.85	94.13	87.08	79.90
European Union 15											
Baseline	2,000	6,945	6,266	7,275	7,659	8,391	8,883	9,018	9,309	9,415	9,479
Scenario 1	2,000	6,968	6,297	7,306	7,690	8,419	8,910	9,047	9,337	9,442	9,506
Scenario 2	2,000	6,941	6,246	7,241	7,618	8,348	8,871	9,004	9,298	9,404	9,466
Scenario 3	2,000	6,812	6,079	7,058	7,431	8,167	8,690	8,811	9,100	9,203	9,259
Impact of Scenario 1 (%)	0.00	0.33	0.50	0.43	0.39	0.33	0.31	0.31	0.30	0.29	0.29
Impact of Scenario 2 (%)	0.00	-0.05	-0.31	-0.46	-0.54	-0.51	-0.13	-0.15	-0.12	-0.12	-0.14
Impact of Scenario 3 (%)	0.00	-1.92	-2.99	-2.97	-2.98	-2.67	-2.17	-2.30	-2.25	-2.25	-2.33
Hungary											
Baseline	450	828	757	704	673	667	659	668	686	700	720
Scenario 1	450	663	550	494	468	464	463	477	498	517	539
Scenario 2	450	1,102	1,217	1,232	1,235	1,243	1,020	981	989	991	988
Scenario 3	450	1,936	2,241	2,327	2,386	2,452	2,215	2,206	2,261	2,310	2,351
Impact of Scenario 1 (%)	0.00	-19.91	-27.35	-29.74	-30.43	-30.48	-29.67	-28.57	-27.32	-26.23	-25.10
Impact of Scenario 2 (%)	0.00	33.06	60.84	75.09	83.66	86.32	54.87	46.88	44.18	41.52	37.21
Impact of Scenario 3 (%)	0.00	133.79	196.01	230.68	254.73	267.47	236.19	230.15	229.70	229.83	226.56
United States											
Baseline	28,576	24,050	23,747	23,805	24,291	24,417	24,705	25,189	25,443	25,615	25,976
Scenario 1	28,576	24,050	23,747	23,804	24,291	24,415	24,705	25,187	25,441	25,612	25,974
Scenario 2	28,576	24,050	23,747	23,805	24,291	24,416	24,704	25,187	25,440	25,612	25,974
Scenario 3	28,576	24,050	23,747	23,805	24,291	24,417	24,705	25,189	25,442	25,615	25,976
Impact of Scenario 1 (%)	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	-0.01	-0.01	-0.01	-0.01
Impact of Scenario 2 (%)	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01
Impact of Scenario 3 (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table B.17. Impacts of EU Enlargement on World Wheat Trade (continued)

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Net Importers											
Japan						(Thousand Metric Tons)					
Baseline	5,350	5,436	5,444	5,472	5,495	5,535	5,565	5,590	5,602	5,613	5,614
Scenario 1	5,350	5,422	5,423	5,453	5,476	5,516	5,547	5,572	5,584	5,596	5,597
Scenario 2	5,350	5,435	5,451	5,485	5,509	5,550	5,564	5,589	5,603	5,611	5,612
Scenario 3	5,350	5,495	5,543	5,563	5,597	5,632	5,645	5,666	5,683	5,688	5,691
Impact of Scenario 1 (%)	0.00	-0.27	-0.39	-0.35	-0.34	-0.34	-0.33	-0.32	-0.31	-0.31	-0.30
Impact of Scenario 2 (%)	0.00	-0.04	0.13	0.23	0.27	0.27	-0.02	-0.02	0.02	-0.03	-0.03
Impact of Scenario 3 (%)	0.00	1.08	1.81	1.67	1.86	1.76	1.44	1.36	1.45	1.34	1.38
China											
Baseline	300	4,149	6,481	7,815	8,012	7,857	7,488	7,237	7,266	6,658	6,483
Scenario 1	300	3,891	6,278	7,707	7,891	7,736	7,373	7,124	7,156	6,551	6,378
Scenario 2	300	4,169	6,641	7,955	8,130	7,964	7,332	7,260	7,282	6,641	6,468
Scenario 3	300	5,505	7,501	8,507	8,794	8,577	7,906	7,867	7,911	7,245	7,099
Impact of Scenario 1 (%)	0.00	-6.23	-3.14	-1.38	-1.51	-1.54	-1.54	-1.56	-1.52	-1.62	-1.63
Impact of Scenario 2 (%)	0.00	0.48	2.47	1.79	1.47	1.36	-2.09	0.33	0.22	-0.27	-0.23
Impact of Scenario 3 (%)	0.00	32.68	15.74	8.85	9.76	9.16	5.58	8.70	8.87	8.81	9.50
Brazil											
Baseline	5,100	4,965	5,082	5,282	5,535	5,790	6,046	6,276	6,609	6,886	7,128
Scenario 1	5,100	4,936	5,036	5,237	5,492	5,749	6,006	6,239	6,574	6,851	7,095
Scenario 2	5,100	4,970	5,104	5,315	5,576	5,833	6,052	6,285	6,615	6,890	7,128
Scenario 3	5,100	5,136	5,321	5,549	5,812	6,072	6,275	6,506	6,832	7,104	7,338
Impact of Scenario 1 (%)	0.00	-0.59	-0.89	-0.84	-0.78	-0.72	-0.65	-0.60	-0.54	-0.50	-0.46
Impact of Scenario 2 (%)	0.00	0.11	0.44	0.63	0.75	0.74	0.11	0.13	0.09	0.06	0.01
Impact of Scenario 3 (%)	0.00	3.46	4.70	5.07	5.01	4.87	3.79	3.66	3.37	3.18	2.96
Mexico											
Baseline	2,900	2,987	3,088	3,172	3,229	3,341	3,450	3,497	3,633	3,713	3,780
Scenario 1	2,900	2,983	3,075	3,158	3,217	3,329	3,438	3,484	3,620	3,701	3,767
Scenario 2	2,900	2,985	3,084	3,175	3,235	3,348	3,454	3,489	3,629	3,710	3,775
Scenario 3	2,900	3,002	3,146	3,240	3,298	3,416	3,523	3,560	3,703	3,787	3,855
Impact of Scenario 1 (%)	0.00	-0.15	-0.41	-0.44	-0.39	-0.38	-0.37	-0.37	-0.35	-0.35	-0.35
Impact of Scenario 2 (%)	0.00	-0.05	-0.10	0.11	0.17	0.19	0.10	-0.21	-0.11	-0.10	-0.15
Impact of Scenario 3 (%)	0.00	0.50	1.90	2.15	2.13	2.22	2.10	1.80	1.92	1.99	1.96
Other EU New Member States											
Baseline	980	663	833	1,023	1,108	1,178	1,236	1,273	1,311	1,362	1,402
Scenario 1	980	958	1,265	1,425	1,496	1,561	1,614	1,644	1,677	1,722	1,759
Scenario 2	980	612	522	608	640	690	913	944	976	1,035	1,099
Scenario 3	980	-246	-811	-784	-811	-816	-566	-579	-592	-567	-537
Impact of Scenario 1 (%)	0.00	44.58	51.83	39.30	35.05	32.48	30.56	29.17	27.90	26.42	25.49
Impact of Scenario 2 (%)	0.00	-7.73	-37.41	-40.57	-42.19	-41.46	-26.10	-25.79	-25.60	-24.04	-21.55
Impact of Scenario 3 (%)	0.00	-137.04	-197.30	-176.71	-173.19	-169.28	-145.83	-145.52	-145.12	-141.59	-138.29
Poland											
Baseline	750	-363	-1,405	-1,014	-823	-790	-761	-730	-686	-622	-592
Scenario 1	750	-8	-829	-473	-304	-281	-264	-248	-219	-168	-147
Scenario 2	750	371	-480	-264	-209	-219	224	221	228	286	334
Scenario 3	750	-2,189	-3,836	-3,588	-3,521	-3,535	-2,936	-2,939	-2,931	-2,860	-2,810
Impact of Scenario 1 (%)	0.00	-97.88	-40.99	-53.34	-63.05	-64.41	-65.33	-66.00	-68.01	-73.01	-75.21
Impact of Scenario 2 (%)	0.00	-202.21	-65.87	-73.94	-74.61	-72.24	-129.44	-130.28	-133.31	-146.02	-156.38
Impact of Scenario 3 (%)	0.00	503.27	172.96	253.79	327.87	347.62	285.84	302.57	327.41	359.41	375.02

Table B.17. Impacts of EU Enlargement on World Corn Trade (continued)

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Net Exporters											
Argentina						(Thousand Metric Tons)					
Baseline	8,490	8,071	9,738	11,155	11,618	12,062	12,430	12,872	13,348	13,856	14,404
Scenario 1	8,490	8,072	9,739	11,154	11,617	12,056	12,425	12,864	13,340	13,847	14,395
Scenario 2	8,490	8,055	9,642	11,037	11,479	11,919	12,293	12,786	13,232	13,765	14,295
Scenario 3	8,490	7,970	9,221	10,745	11,026	11,539	11,821	12,379	12,751	13,321	13,793
Impact of Scenario 1 (%)	0.00	0.01	0.01	-0.01	-0.01	-0.05	-0.04	-0.07	-0.06	-0.07	-0.06
Impact of Scenario 2 (%)	0.00	-0.20	-0.98	-1.06	-1.19	-1.18	-1.11	-0.67	-0.86	-0.66	-0.76
Impact of Scenario 3 (%)	0.00	-1.25	-5.31	-3.68	-5.09	-4.33	-4.91	-3.83	-4.47	-3.86	-4.24
Czech Republic											
Baseline	90	43	-29	-75	-102	-126	-117	-121	-139	-155	-169
Scenario 1	90	53	-10	-52	-78	-100	-91	-94	-111	-127	-140
Scenario 2	90	61	6	-31	-53	-74	-68	-71	-86	-100	-112
Scenario 3	90	117	64	30	10	-7	4	8	-3	-13	-21
Impact of Scenario 1 (%)	0.00	22.15	-67.57	-30.94	-24.12	-20.36	-22.45	-22.36	-19.94	-18.31	-17.16
Impact of Scenario 2 (%)	0.00	41.08	-121.31	-59.05	-47.64	-41.33	-41.63	-41.22	-38.09	-35.76	-33.81
Impact of Scenario 3 (%)	0.00	170.41	-318.87	-140.82	-110.25	-94.55	-103.39	-106.25	-97.52	-91.92	-87.85
Hungary											
Baseline	500	1,546	1,208	1,066	1,280	1,328	1,376	1,387	1,423	1,462	1,500
Scenario 1	500	1,535	1,233	1,097	1,312	1,361	1,414	1,427	1,466	1,506	1,548
Scenario 2	500	1,800	1,632	1,549	1,790	1,861	1,867	1,875	1,924	1,963	1,996
Scenario 3	500	3,116	3,063	3,066	3,466	3,656	3,737	3,828	3,968	4,097	4,217
Impact of Scenario 1 (%)	0.00	-0.74	2.10	2.91	2.47	2.52	2.78	2.85	3.00	3.04	3.15
Impact of Scenario 2 (%)	0.00	16.43	35.04	45.30	39.82	40.11	35.65	35.14	35.18	34.26	33.06
Impact of Scenario 3 (%)	0.00	101.50	153.51	187.53	170.77	175.31	171.57	175.94	178.83	180.25	181.10
United States											
Baseline	49,913	53,477	56,396	58,076	60,444	61,728	63,006	63,994	64,473	65,033	65,637
Scenario 1	49,913	53,477	56,397	58,076	60,445	61,729	63,006	63,996	64,474	65,034	65,637
Scenario 2	49,913	53,477	56,397	58,076	60,444	61,729	63,006	63,997	64,470	65,039	65,630
Scenario 3	49,913	53,477	56,396	58,076	60,443	61,728	63,006	63,994	64,474	65,033	65,637
Impact of Scenario 1 (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact of Scenario 2 (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.01
Impact of Scenario 3 (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Importers											
Japan											
Baseline	16,500	16,262	15,996	15,540	15,395	15,316	15,156	14,878	14,601	14,375	14,235
Scenario 1	16,500	16,269	16,007	15,549	15,405	15,325	15,165	14,886	14,610	14,383	14,243
Scenario 2	16,500	16,275	15,997	15,542	15,393	15,314	15,155	14,882	14,601	14,380	14,234
Scenario 3	16,500	16,310	15,973	15,556	15,378	15,323	15,146	14,892	14,597	14,389	14,234
Impact of Scenario 1 (%)	0.00	0.05	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Impact of Scenario 2 (%)	0.00	0.08	0.00	0.01	-0.02	-0.01	-0.01	0.03	0.00	0.04	0.00
Impact of Scenario 3 (%)	0.00	0.30	-0.15	0.10	-0.11	0.05	-0.06	0.09	-0.03	0.10	0.00
China											
Baseline	-7,900	-4,441	229	3,025	4,218	4,328	4,430	4,334	3,904	3,555	3,361
Scenario 1	-7,900	-4,450	270	3,082	4,275	4,381	4,486	4,387	3,959	3,608	3,417
Scenario 2	-7,900	-4,263	462	3,252	4,425	4,539	4,528	4,527	4,057	3,731	3,505
Scenario 3	-7,900	-3,341	804	3,804	4,838	5,098	4,982	5,109	4,586	4,339	4,084
Impact of Scenario 1 (%)	0.00	0.19	17.84	1.91	1.37	1.22	1.27	1.24	1.42	1.50	1.65
Impact of Scenario 2 (%)	0.00	-4.02	101.41	7.51	4.93	4.87	2.21	4.46	3.92	4.95	4.29
Impact of Scenario 3 (%)	0.00	-24.78	250.86	25.77	14.71	17.79	12.46	17.90	17.48	22.05	21.51
Other EU New Member States											
Baseline	600	801	898	1,001	1,048	1,103	1,144	1,166	1,184	1,202	1,219
Scenario 1	600	745	798	875	907	953	988	1,008	1,024	1,042	1,059
Scenario 2	600	712	806	903	952	1,008	1,067	1,103	1,129	1,153	1,173
Scenario 3	600	380	444	519	551	594	648	677	695	709	717
Impact of Scenario 1 (%)	0.00	-6.93	-11.09	-12.62	-13.46	-13.63	-13.64	-13.56	-13.50	-13.27	-13.13
Impact of Scenario 2 (%)	0.00	-11.16	-10.26	-9.84	-9.14	-8.57	-6.74	-5.43	-4.64	-4.07	-3.80
Impact of Scenario 3 (%)	0.00	-52.50	-50.58	-48.17	-47.36	-46.10	-43.35	-41.92	-41.27	-41.03	-41.18
Poland											
Baseline	20	-122	84	284	341	235	247	266	290	322	342
Scenario 1	20	-144	36	242	300	193	205	224	248	279	299
Scenario 2	20	-232	-173	21	75	-37	78	95	117	153	179
Scenario 3	20	-550	-498	-317	-284	-439	-325	-327	-323	-305	-297
Impact of Scenario 1 (%)	0.00	18.47	-56.70	-14.87	-12.16	-17.84	-17.29	-16.01	-14.64	-13.15	-12.43
Impact of Scenario 2 (%)	0.00	91.13	-305.63	-92.67	-78.14	-115.95	-68.50	-64.24	-59.52	-52.27	-47.53
Impact of Scenario 3 (%)	0.00	352.00	-692.01	-211.56	-183.34	-286.92	-231.25	-222.54	-211.23	-194.79	-186.86
South Korea											
Baseline	9,500	9,620	9,692	9,648	9,785	10,021	10,266	10,498	10,750	11,034	11,359
Scenario 1	9,500	9,621	9,694	9,650	9,787	10,023	10,268	10,500	10,751	11,036	11,361
Scenario 2	9,500	9,626	9,697	9,653	9,789	10,025	10,266	10,502	10,752	11,038	11,361
Scenario 3	9,500	9,651	9,698	9,665	9,793	10,036	10,270	10,513	10,757	11,049	11,368
Impact of Scenario 1 (%)	0.00	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Impact of Scenario 2 (%)	0.00	0.06	0.05	0.05	0.04	0.04	0.00	0.04	0.02	0.04	0.02
Impact of Scenario 3 (%)	0.00	0.32	0.06	0.18	0.08	0.15	0.04	0.14	0.07	0.13	0.08

Table B.17. Impacts of EU Enlargement on World Barley Trade (continued)

	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Net Exporters											
Australia						(Thousand Metric Tons)					
Baseline	4,300	4,840	4,588	4,493	4,508	4,518	4,550	4,579	4,556	4,577	4,554
Scenario 1	4,300	4,848	4,613	4,529	4,547	4,558	4,590	4,618	4,596	4,615	4,593
Scenario 2	4,300	4,833	4,550	4,414	4,403	4,395	4,433	4,486	4,470	4,495	4,477
Scenario 3	4,300	4,769	4,370	4,172	4,122	4,090	4,113	4,163	4,141	4,160	4,135
Impact of Scenario 1 (%)	0.00	0.17	0.54	0.80	0.85	0.87	0.87	0.86	0.86	0.85	0.84
Impact of Scenario 2 (%)	0.00	-0.14	-0.83	-1.76	-2.33	-2.73	-2.57	-2.03	-1.89	-1.78	-1.71
Impact of Scenario 3 (%)	0.00	-1.45	-4.75	-7.16	-8.57	-9.49	-9.60	-9.08	-9.12	-9.10	-9.20
Canada											
Baseline	1,950	1,891	2,021	2,103	2,096	2,256	2,385	2,455	2,532	2,644	3,010
Scenario 1	1,950	1,966	2,157	2,246	2,243	2,400	2,527	2,594	2,670	2,781	3,144
Scenario 2	1,950	1,836	1,768	1,751	1,669	1,794	2,066	2,165	2,256	2,385	2,761
Scenario 3	1,950	1,281	929	773	605	686	970	1,065	1,128	1,241	1,595
Impact of Scenario 1 (%)	0.00	3.98	6.69	6.84	6.99	6.40	5.96	5.66	5.46	5.18	4.43
Impact of Scenario 2 (%)	0.00	-2.92	-12.52	-16.74	-20.38	-20.45	-13.39	-11.82	-10.89	-9.78	-8.29
Impact of Scenario 3 (%)	0.00	-32.26	-54.06	-63.22	-71.12	-69.57	-59.31	-56.63	-55.44	-53.06	-47.01
Czech Republic											
Baseline	275	494	903	986	990	1,034	1,022	1,010	1,018	1,030	1,035
Scenario 1	275	438	786	866	873	923	915	908	919	933	942
Scenario 2	275	494	1,024	1,188	1,223	1,284	1,142	1,094	1,091	1,085	1,079
Scenario 3	275	685	1,299	1,481	1,515	1,574	1,413	1,365	1,370	1,373	1,376
Impact of Scenario 1 (%)	0.00	-11.30	-12.97	-12.17	-11.78	-10.80	-10.41	-10.07	-9.68	-9.37	-9.02
Impact of Scenario 2 (%)	0.00	-0.10	13.42	20.50	23.57	24.13	11.81	8.36	7.12	5.37	4.29
Impact of Scenario 3 (%)	0.00	38.64	43.94	50.22	53.02	52.21	38.30	35.21	34.54	33.32	32.98
European Union 15											
Baseline	2,150	2,492	2,965	3,273	3,475	3,753	4,035	4,331	4,566	4,806	5,001
Scenario 1	2,150	2,505	2,981	3,289	3,491	3,768	4,050	4,346	4,581	4,821	5,016
Scenario 2	2,150	2,481	2,928	3,233	3,426	3,703	4,012	4,298	4,541	4,781	4,977
Scenario 3	2,150	2,374	2,831	3,112	3,305	3,573	3,889	4,165	4,405	4,639	4,831
Impact of Scenario 1 (%)	0.00	0.52	0.56	0.47	0.46	0.40	0.37	0.35	0.33	0.32	0.30
Impact of Scenario 2 (%)	0.00	-0.45	-1.23	-1.22	-1.41	-1.34	-0.58	-0.76	-0.55	-0.52	-0.48
Impact of Scenario 3 (%)	0.00	-4.72	-4.52	-4.94	-4.90	-4.79	-3.61	-3.82	-3.52	-3.47	-3.41
Hungary											
Baseline	0	342	505	535	539	538	522	510	505	498	488
Scenario 1	0	274	407	435	439	438	426	416	413	409	401
Scenario 2	0	382	627	687	705	712	645	621	610	596	579
Scenario 3	0	572	904	982	1,009	1,026	951	929	926	918	907
Impact of Scenario 1 (%)	0.00	-19.91	-19.37	-18.67	-18.53	-18.58	-18.49	-18.40	-18.20	-18.01	-17.79
Impact of Scenario 2 (%)	0.00	11.65	24.29	28.36	30.82	32.32	23.49	21.87	20.91	19.47	18.62
Impact of Scenario 3 (%)	0.00	67.10	79.07	83.45	87.27	90.69	82.07	82.29	83.44	84.13	85.95
Net Importers											
Japan											
Baseline	1,300	1,360	1,370	1,320	1,328	1,324	1,320	1,295	1,268	1,250	1,246
Scenario 1	1,300	1,353	1,361	1,313	1,321	1,318	1,314	1,289	1,262	1,245	1,241
Scenario 2	1,300	1,366	1,391	1,339	1,351	1,347	1,328	1,309	1,279	1,261	1,256
Scenario 3	1,300	1,424	1,435	1,392	1,402	1,402	1,376	1,360	1,328	1,310	1,305
Impact of Scenario 1 (%)	0.00	-0.52	-0.60	-0.49	-0.51	-0.49	-0.47	-0.45	-0.45	-0.44	-0.42
Impact of Scenario 2 (%)	0.00	0.46	1.53	1.46	1.74	1.72	0.60	1.10	0.88	0.88	0.81
Impact of Scenario 3 (%)	0.00	4.66	4.78	5.46	5.61	5.85	4.26	5.01	4.75	4.82	4.75
China											
Baseline	2,000	2,200	2,746	2,920	3,110	3,294	3,471	3,675	3,871	4,072	4,284
Scenario 1	2,000	2,189	2,728	2,904	3,095	3,279	3,457	3,661	3,858	4,058	4,271
Scenario 2	2,000	2,214	2,791	2,972	3,167	3,352	3,505	3,711	3,905	4,103	4,314
Scenario 3	2,000	2,318	2,900	3,097	3,289	3,480	3,624	3,833	4,025	4,226	4,436
Impact of Scenario 1 (%)	0.00	-0.51	-0.64	-0.55	-0.49	-0.45	-0.41	-0.38	-0.35	-0.33	-0.30
Impact of Scenario 2 (%)	0.00	0.61	1.63	1.79	1.82	1.77	0.99	0.98	0.86	0.78	0.69
Impact of Scenario 3 (%)	0.00	5.36	5.63	6.07	5.75	5.65	4.40	4.30	3.97	3.80	3.54
Other EU New Member States											
Baseline	470	542	667	807	831	879	924	952	972	1,005	1,049
Scenario 1	470	623	802	962	993	1,044	1,088	1,115	1,133	1,165	1,204
Scenario 2	470	282	68	39	-51	-65	99	180	224	282	341
Scenario 3	470	-697	-1,463	-1,778	-2,049	-2,161	-1,942	-1,831	-1,768	-1,688	-1,606
Impact of Scenario 1 (%)	0.00	14.96	20.28	19.24	19.47	18.77	17.84	17.13	16.60	15.88	14.74
Impact of Scenario 2 (%)	0.00	-48.01	-89.88	-95.16	-106.13	-107.39	-89.23	-81.09	-76.94	-71.92	-67.47
Impact of Scenario 3 (%)	0.00	-228.59	-319.28	-320.34	-346.60	-345.86	-310.27	-292.42	-281.93	-267.90	-253.04
Poland											
Baseline	350	-13	-482	-295	-224	-207	-207	-197	-184	-158	-138
Scenario 1	350	18	-402	-223	-157	-142	-144	-136	-125	-101	-85
Scenario 2	350	95	-459	-331	-293	-299	-143	-118	-108	-67	-40
Scenario 3	350	-366	-1,040	-952	-948	-990	-833	-832	-851	-836	-835
Impact of Scenario 1 (%)	0.00	-245.17	-16.51	-24.37	-30.15	-31.50	-30.68	-30.98	-31.80	-35.92	-38.73
Impact of Scenario 2 (%)	0.00	-857.47	-4.70	12.23	30.58	44.39	-31.18	-40.33	-41.11	-57.73	-71.27
Impact of Scenario 3 (%)	0.00	2,811.91	115.76	222.91	322.84	378.64	301.57	322.33	363.19	428.54	505.47

Table C.1. Scenario 1 Welfare Changes

Welfare effects of EU Enlargement in 1000 US dollars at 1995 prices in Wheat market for 2013/14

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	-44819.83	15290.12	0.00	-24.30	-29554.01
Hungary	-37834.26	21102.37	0.00	-17.87	-16749.76
Poland	-77075.94	42965.67	0.00	-1.56	-34111.83
Other NMS*	-51050.34	39371.45	0.00	0.00	-11678.89

* Other NMS are Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia.

Welfare effects of EU Enlargement in 1000 US dollars at 1995 prices in Corn market for 2013/14

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	2410.84	-446.65	0.00	-0.11	1964.08
Hungary	-9030.70	737.28	0.00	-8.49	-8301.91
Poland	1312.28	-278.90	0.00	0.00	1033.38
Other NMS*	5679.86	-2102.47	0.00	0.42	3577.81

* Other NMS are Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia.

Welfare effects of EU Enlargement in 1000 US dollars at 1995 prices in Barley market for 2013/14

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	-13522.52	2431.97	0.00	-16.25	-11106.80
Hungary	-9258.87	2363.79	0.00	-11.94	-6907.02
Poland	-7676.25	1317.79	0.00	0.00	-6358.46
Other NMS*	-26608.82	5641.79	0.00	0.00	-20967.03

* Other NMS are Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia.

Table C.2. Scenario 2 Welfare Changes

Welfare effects of EU Enlargement in 1000 US dollars at 1995 prices in Wheat market for 2013/14

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	389963.30	-65175.33	17686.68	-12.31	307088.98
Hungary	209121.06	-43068.94	4525.28	-14.02	161512.82
Poland	260954.00	54173.58	249.12	-1.57	314876.89
Other NMS*	209898.58	-44774.83	253.78	0.37	164870.34

* Other NMS are Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia.

Welfare effects of EU Enlargement in 1000 US dollars at 1995 prices in Corn market for 2013/14

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	25118.03	-2066.04	1287.83	0.13	21764.29
Hungary	195870.54	-7698.68	20391.21	-0.48	167780.17
Poland	23122.62	-1632.71	0.00	0.00	21489.91
Other NMS*	55421.18	-7982.88	1692.82	0.74	45746.22

* Other NMS are Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia.

Welfare effects of EU Enlargement in 1000 US dollars at 1995 prices in Barley market for 2013/14

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	155585.11	-8973.31	47002.45	-11.63	99597.72
Hungary	47060.02	-3423.58	6188.01	-10.80	37437.63
Poland	129823.48	1607.71	0.00	0.00	131431.19
Other NMS*	237975.92	-14607.02	4354.94	1.74	219015.70

* Other NMS are Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia.

Table C.3. Scenario 3 Welfare Changes

Welfare effects of EU Enlargement in 1000 US dollars at 1995 prices in Wheat market for 2013/14

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	499642.37	-63388.49	23891.30	-3.28	412359.30
Hungary	318422.73	-41953.14	8683.59	-7.96	267778.04
Poland	502656.59	57776.22	235.31	-1.59	560195.91
Other NMS*	362649.70	-42674.75	10079.66	14.67	309909.96

* Other NMS are Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia.

Welfare effects of EU Enlargement in 1000 US dollars at 1995 prices in Corn market for 2013/14

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	31547.83	-2045.13	1286.21	0.13	28216.62
Hungary	303005.89	-7629.15	43015.15	17.87	252379.46
Poland	32368.10	-1616.96	0.00	0.00	30751.14
Other NMS*	85564.34	-7916.47	1689.82	0.74	75958.79

* Other NMS are Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia.

Welfare effects of EU Enlargement in 1000 US dollars at 1995 prices in Barley market for 2013/14

Country	Change in Producer Surplus	Equivalent Variation	Change in Export Subsidy	Change in Tariff Revenue	Net Change in Welfare
Czech Republic	195592.66	-8386.97	56169.04	-7.96	131028.69
Hungary	74504.39	-3271.05	8747.45	-9.77	62476.12
Poland	180748.55	2048.24	0.00	0.00	182796.79
Other NMS*	387069.21	-14205.57	37910.29	15.18	334968.53

* Other NMS are Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia.