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## THE UKRAINE IN KRU (KAZAKHSTAN, RUSSIA AND UKRAINE): PROSPECTS FOR THE UKRAINIAN GRAIN ECONOMY

**Abstract.** During the years leading up the Russian drought of 2010, the share of the grain in exports from Kazakhstan, Russia and Ukraine (KRU) in the world grain trade steadily increased. In 2008/09 and 2009/10 they together exported an average of 36.5 million tons of wheat per year, which accounted for more than 26 percent of the world wheat exports in those two years. This was greater than the exports of any of the other major exporters – US, Canada, EU-27, and Australia. Given such a growing role for the grain sectors in the KRU region, it is important to learn more about Ukraine's role in global market behavior. In this paper we focus on the specifics of Ukrainian agriculture, its growing integration in world markets, and its potential role in the future of grain market developments.

**Key words:** Ukrainian agriculture, grain exports, land structure, agriholdings, agricultural and trade policy

### INTRODUCTION

Food prices are a major contextual issue that has significant impact on Ukraine. World food prices as well as other commodity prices that peaked in mid 2008, fell substantially by early 2009 but rose again during 2009 and into 2010 and 2011<sup>3</sup>. They are now close to the 2008 peaks and far above levels in 2000–2003 (Figure 1). It is not only food prices but also the price of farm pro-

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<sup>3</sup> Not captured in this figure is that prices surged again in midyear 2012 due mainly to drought in the US.

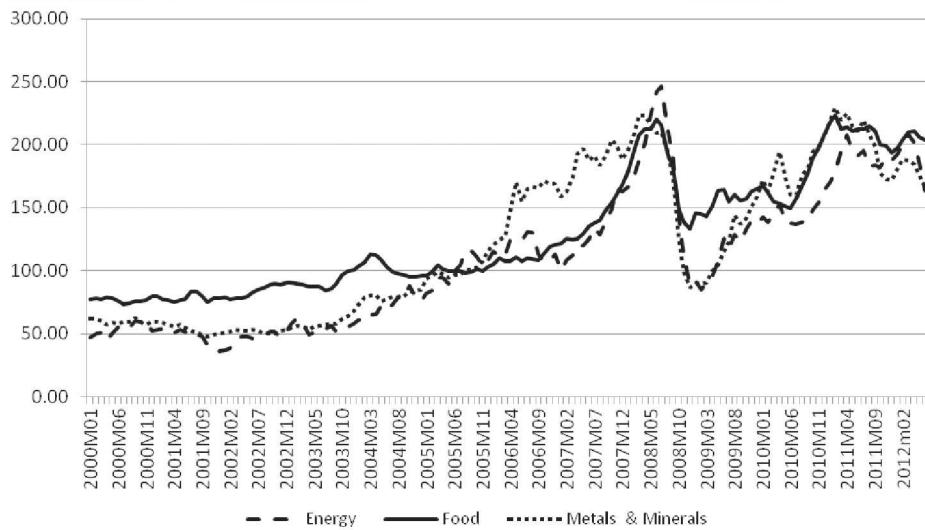


FIGURE 1. World Bank food, energy, metals price indices, 01/2000 to 05/2012, 2005=100  
 RYSUNEK 1. Wskaźniki cenowe Banku Światowego dotyczące żywności, energii oraz metali, 01/2000 do 05/2012, 2005 =100  
 Source: World Bank.

duction inputs that are high and volatile, and it seems will be so for the foreseeable future.

Commodity markets have always been volatile, but it is expected that many unknowns and uncertainties will continue and likely increase the volatility of these prices in the future. The outlook picture generated by OECD-FAO (2012), FAPRI (2012) and others who assess future prospects for agricultural markets have higher and more persistently higher prices than we have ever seen projected in more than two decades of doing this type of analysis. Oil prices are much more uncertain due to the overlay of political unrest in the Middle East, and an unexpected oil price shock could surely damage the weak economic recovery currently underway. Exchange rates are also quite uncertain and further weakening of the US dollar will further strengthen prices expressed in US\$.

Government policies can also change, and policies on biofuels are likely more critical to these markets than direct agricultural policies, because many of the latter have been decoupled from production decisions. Likewise, government policies on export restrictions, such as in Russia and Ukraine implemented in 2010 came under pressure and did change if only because production returned to normal levels. Weather interruptions always have been a big factor in volatility and always will be, but climate change effects seem to have increased the frequency and severity of weather damage to crops. In short, there are a wide range of possible outcomes and increasing difficulty for producers and policy makers to make decisions in view of increased uncertainty of future developments.

High prices are beneficial to some economic interests and harmful to others, as was carefully documented in the 2011 SOFI report [FAO 2011]; and high and volatile prices may impact Ukraine's agricultural sector. In particular, higher pri-

ces could stimulate more production, more rapid adoption of improved technologies, increased input use, more investment in R&D and agricultural infrastructure, but they can also put more pressure on constrained water supplies and fragile environments.

Another major factor in the setting for this paper is the largest financial crisis in Ukraine since the collapse of the Soviet Union. Real GDP growth was very robust in the middle of the last decade (Figure 2), but in 2009, the Europe and Central Asia region, including the European Union experienced the largest decline in real GDP among all the regions in the world. Ukraine was among the worst hit economies in the region and in the world in terms of GDP decline in 2009. Though the recovery in 2011 was reasonably good, the IMF [2012] now expects declines in growth in 2012 and 2013, which means a long and slow recovery and many years before returning to the growth path that existed in Ukraine and in many countries of the region prior to the 2009 financial crisis.

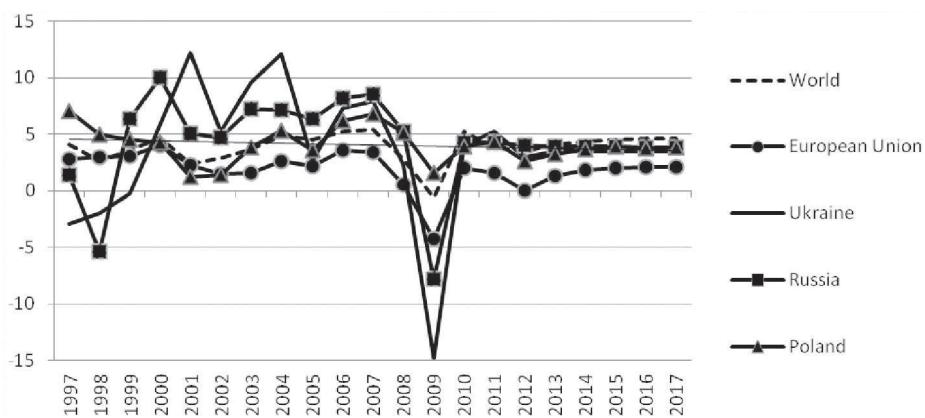


FIGURE 2. Annual growth in real Gross Domestic Product [%]  
RYSUNEK 2. Roczny wzrost w realnym produkcie krajowym brutto [%]  
Source: IMF [2012].

What is KRU and why is it important? KRU stands for Kazakhstan, Russia and Ukraine. It is very significant that these three countries which accounted for about 14 percent of global grain imports from 1987 to 1990 (Figure 3), have accounted for more than 13 percent of global grain exports from 2005 to 2008 (FAO-EBRD 2009) and more than 15 percent from 2009 to 2012. Over the past few years and before the drought of 2010, the share of the KRU in the world wheat trade has been steadily growing. In particular, according to USDA, in 2008/2009 and 2009/2010 Russia, Ukraine and Kazakhstan together exported an average of 36.5 million tons of wheat per year. This accounted for more than 26 percent of the world wheat exports in those two years (Figure 4). This was greater than the exports of any of the other major exporters – US, Canada, EU-27, and Australia. Due to very poor harvests during the drought of 2010, exports crashed and were further constrained by Russia's export ban and Ukr-

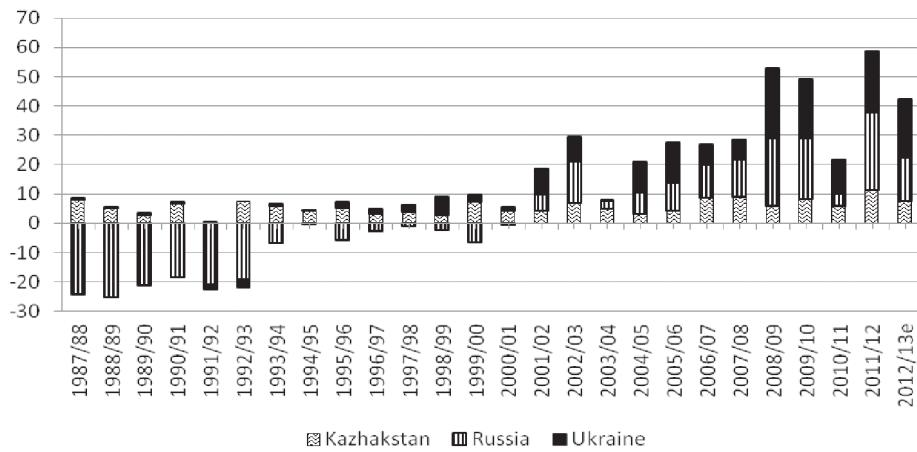


FIGURE 3. Kazakhstan, Russia, and Ukraine grain net exports [1000 MT]

RYSUNEK 3. Eksport zbożowy netto Kazachstanu, Rosji i Ukrainy [1000 MT]

Source: USDA, PSD view database.

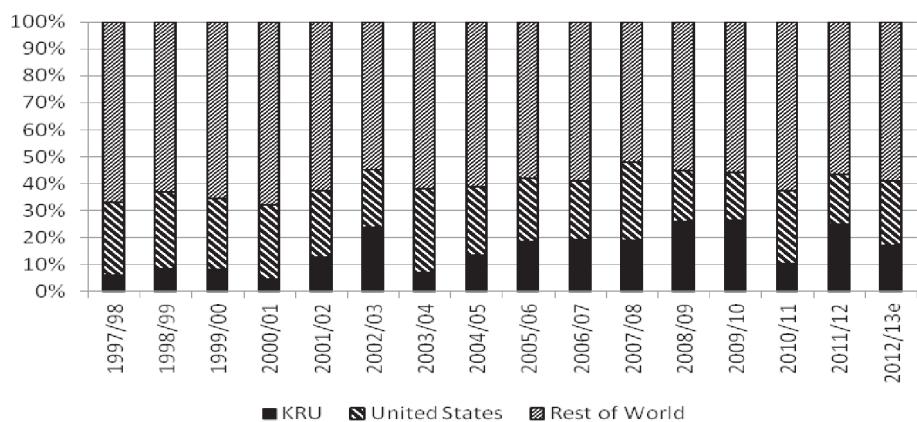


FIGURE 4. Share of KRU in world wheat exports [%]

RYSUNEK 4. Udział KRU w światowym eksportie pszenicy [%]

Source: USDA, PSD view database.

ine's export quotas. However, after the much improved harvest of 2011, USDA projects that grain exports from these three countries in 2011/2012 will be 59.7 mmt, more than the previous record in 2008/2009.

Therefore, given the growing role of the grain sectors of Kazakhstan, Russia and Ukraine, it is important to learn more about Ukraine's role in market behavior. In this paper we focus on the specifics of Ukrainian agriculture, its growing integration in world markets, and its potential role in the future of grain market developments.

## OVERVIEW OF UKRAINIAN AGRICULTURE AND EXPORTS

Ukraine is a country rich in agricultural resources. Its agricultural land area accounts for 42.9 million ha (or 71 percent) of the total land area. Ukraine is a home to 25 percent of the world's most fertile agricultural soil. According to the State Statistics Committee of Ukraine, the agricultural sector accounted for 7.6 percent of the Ukrainian GDP in 2009.

The state and collective farms of Soviet times have been transformed into various types of private enterprises and the land has mostly been distributed to former farm workers, who have land shares and most of which have been converted to land titles [Meyers et al. 2005]. Some of this land is cultivated in small household farms but the number of large enterprises has been growing. There is a very active rental market for agricultural land, but there is a moratorium on the sale of agricultural land in Ukraine until January 1st, 2013. However, this moratorium has been extended every year since 2002, and there is a continuous debate among Ukrainian policymakers about the extension of the moratorium. As in the past, it is unlikely that the sale of the land would be allowed in the upcoming year.

Ukraine's major crops are wheat, barley, corn and sunflower seed (Figure 5). Increasing production of biodiesel in EU and good rapeseed prices provided an incentive for Ukrainian farmers to produce more rapeseed to meet the demand from the Western neighbors. As can be seen from figure 5 rapeseed production has been increasing since 2006, while total production of all these crops declined until about 2003/2004 then increased substantially in recent years.

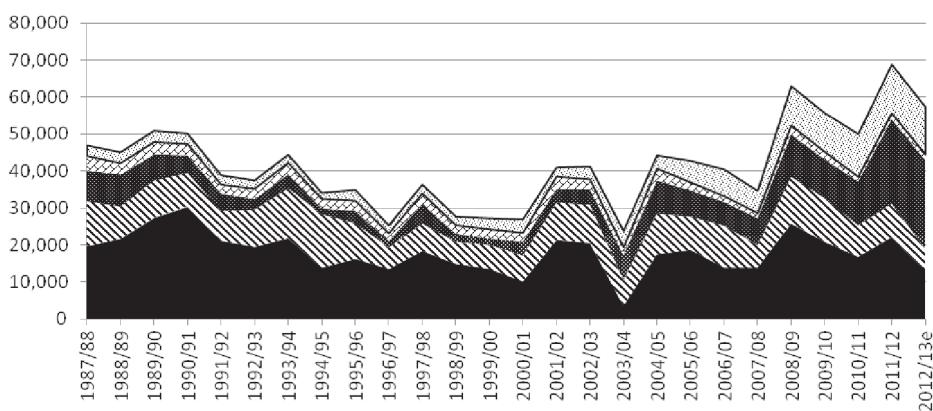


FIGURE 5. Ukrainian production of major crops [1000 MT]

RYSUNEK 5. Produkcja głównych zbóż na Ukrainie [1000 MT]

Source: USDA, PSD view database.

During the transition to market economy after 1990, the land allocation to fodder crops has been declining significantly. This can be explained by the rapid decline of the livestock industry after the overinvestment during the Soviet times and the loss of the high incentives provided during those times. During the trans-

ition period, the sector has seen a decrease in the livestock numbers, and, as a result, decline in the demand for the forage crops (Figure 6).

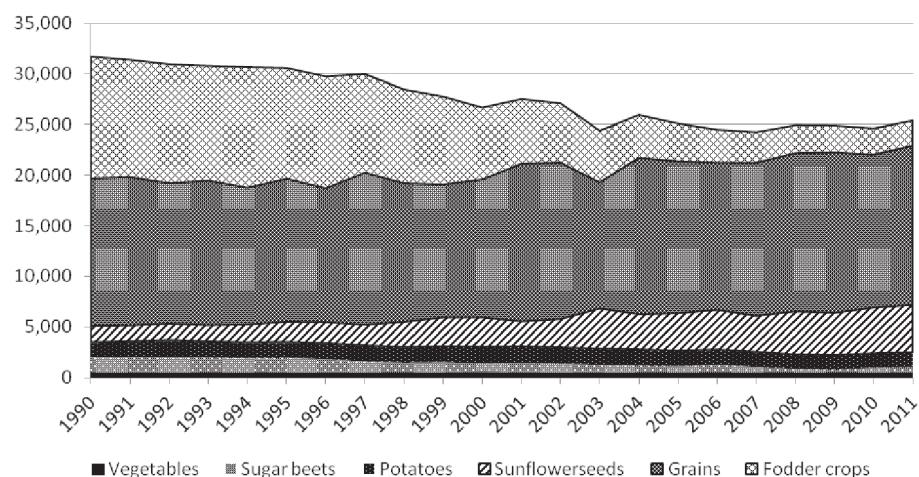


FIGURE 6. Shift of Ukrainian crop area from forage to grain and oilseed production [ha]  
RYSUNEK 6. Zmiana w areale ukraińskich upraw – od produkcji roślin pastewnych ku produkcji zbóż i nasion oleistych [ha]

Source State Statistics of Ukraine.

Some of the land moving out of fodder crops has been moved into the production of grains and sunflower seed. However, there was also a significant decline in cropland area compared to the Soviet period. This might be explained by the fact that during the Soviet times, the prices were highly distorted and state plans required the use of less productive land regardless of its economic value. As the farmers have become more responsive to and dependent on market forces, they have become less prone to using such land.

The top five agricultural exports of Ukraine are attributed to crude sun oil (16%), wheat (11%), barley (11%), rapeseed (8%), and corn (4.5%) [State Statistics... 2008]. While the share of the imports of Ukrainian agricultural produce from Russia and other CIS countries has remained more or less the same since 2002, there has been a significant increase in the Ukrainian agricultural exports to the EU-27 and Middle Eastern markets.

Rail is the major means of delivering grain to Ukrainian ports on the Black Sea. It accounts for 70 percent of the total grain delivery to the ports. Trucks account for 24 percent, while 3 percent of the grain is delivered by river transport [FAO-EBRD 2009]. During the Soviet era, river transportation on the major Ukrainian river Dnieper was rather developed; however, after the 1990s river transport has become almost nonexistent. Increased demand for Ukrainian grain exports has stimulated some increased investment in river barge transportation by the large trading company Nibilon, but unfortunately, it is too early to speak about its re-birth on a large scale.

Most of the grain storage facilities of Soviet times have been privatized and new, modern facilities are being built mainly by grain trading companies. There

are more than 700 certified grain storage facilities with the total capacity of 29.5 million tons. Twenty percent of these facilities belong to the government, the rest are private. Elevator account for 40 percent of the storage capacity; the remainder of grains is in the flat storage [FAO-EBRD 2009].

## MAJOR GRAINS PRODUCTION, USE AND EXPORT

This section focuses on three major crops – wheat, barley, and corn – produced in Ukraine. As was seen before (Figure 5), total production of these commodities fell then rose again during the last 20 years, but there is significant volatility in the year to year production. The main reason for this is the volatility in grain yields. As can be seen from Table 1, yields of Ukraine's major crops are two to three times more volatile than those from EU-27 and the U.S.

TABLE 1. Major grains yield comparisons [MT/HA]  
TABELA 1. Porównanie plonów głównych zbóż [MT/HA]

Commodity	Barley				Corn				Wheat	
	Country	Ukraine	EU-27	U. S.	Ukraine	EU-27	U. S.	Ukraine	EU-27	U. S.
1999/2000		1.85	4.02	3.2	2.52	6.43	8.4	2.29	4.97	2.87
2000/2001		1.86	4.26	3.29	3.01	5.62	8.59	1.98	4.98	2.82
2001/2002		2.6	4.17	3.13	3.24	6.14	8.67	3.1	4.76	2.7
2002/2003		2.5	4.16	2.96	3.52	6.41	8.12	3.05	5.02	2.36
2003/2004		1.49	3.97	3.17	3.46	5.24	8.92	1.47	4.55	2.97
2004/2005		2.45	4.67	3.74	3.86	6.87	10.06	3.17	5.65	2.9
2005/2006		2.06	3.97	3.49	4.32	6.62	9.29	2.85	5.12	2.82
2006/2007		2.17	4.06	3.29	3.74	6.34	9.36	2.53	5.1	2.6
2007/2008		1.46	4.17	3.23	3.9	5.63	9.46	2.34	4.86	2.7
2008/2009		3.03	4.52	3.42	4.69	7.09	9.66	3.67	5.67	3.02
2009/2010		2.37	4.46	3.93	5.02	6.87	10.34	3.09	5.38	2.99
2010/2011		1.97	4.25	3.93	4.5	6.99	9.59	2.68	5.23	3.12
2011/2012		2.43	4.25	3.73	6	7.03	9.3	3.28	5.3	2.95
Average		2.17	4.22	3.42	3.98	6.41	9.21	2.73	5.12	2.83
Standard Variation		0.45	0.21	0.32	0.92	0.60	0.65	0.60	0.33	0.20

Source: USDA, PSD view database.

Yield statistics also suggest that there is a big potential for increased production of barley, corn and wheat if Ukrainian yields approach the averages of the EU and the U.S. For example, average barley yields in Ukraine are about two-thirds the level of yields in the U. S. and are about half the level of average EU yields. If Ukraine is to catch up with such yields, its barley production could increase by 9.4 million MT.

The situation with wheat and corn yields indicates even more potential for improvement. Ukrainian corn yields are about 60 percent of those in the EU-27, and less than half the yields of U.S. farmers. A similar situation exists with the wheat yields. While Ukrainian and U.S. wheat yields do not differ much on average, EU-27 wheat yields are twice as high as those that are seen in Ukraine. If

both corn and wheat yields were to improve, the Ukrainian production of corn and wheat has the potential to increase by 14,300 and 16,000 thousand MT, respectively. While it is not expected that government support and input levels would match those of the US and EU, just the adoption of improved practices and seed stock could improve yields significantly as well as to reduce yield variance. Such yields are already achieved on some farms, but they are still a small portion of total cropland.

As was mentioned earlier, over time there has been a gradual decrease in the land area used for fodder crops due to the decline in the livestock numbers. For the same reasons there has been a decline in the use of the major crops for feed. After the collapse of the Soviet Union, only corn feed has returned to its pre-collapse level (Figure 7). The amount of wheat used for feed in 2008–2010 was 20 percent of the 1990 level and for barley it decreased by 50 percent.

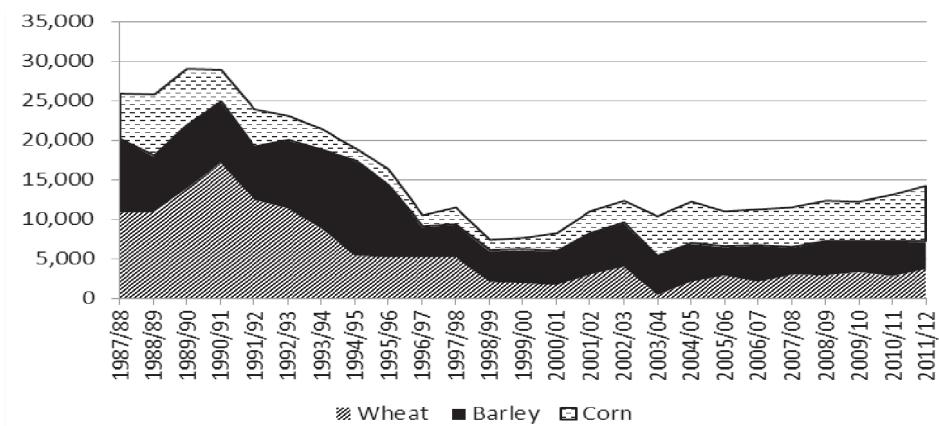


FIGURE 7. Ukrainian major crops' feed use [1000 MT]  
RYSUNEK 7. Główne zboża Ukrainy wykorzystywane jako pasze [1000 MT]  
Source: USDA, PSD view database.

At the same time there has been an increase in the exports of all major Ukrainian crops starting from mid-1990s (Figure 8). Wheat has seen the largest increase. Starting from 2001 Ukraine was exporting on average 5.5 million MT of wheat per year, compared to 1.2 million MT per year during the 1990s. Ukrainian corn exports increased from almost zero in the early 1990s to 7.4 million MT per year in 2008–2011. Barley exports increased from 350 thousand MT in 1990 to 5.9 million MT record in 2008.

So, Ukraine is a growing factor in international grain markets. Although 2010 was unusual due to the crop losses in 2010, Ukraine has been exporting about 7.9 percent of total world grain, 8 percent of wheat, 32.8 percent of barley and 5.9 percent of corn total exports in the previous two years of 2008/2009 and 2009/2010. Also recent research has shown that Black Sea prices closely follow EU wheat prices, so it is clear that Ukraine is becoming more integrated with world grain markets and is heavily influenced by them [Goychuk and Meyers

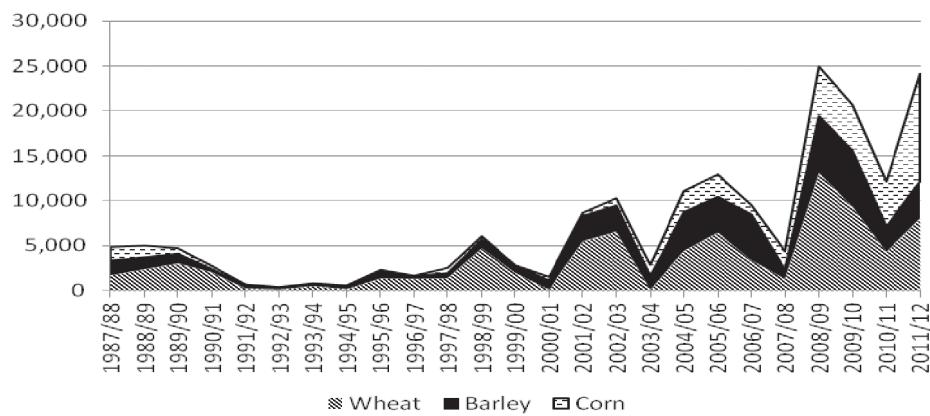


FIGURE 8. Dynamics of the Ukrainian grain exports [1000 MT]  
 RYSUNEK 8. Dynamika ukraińskiego eksportu zbożowego [1000 MT]

Source: USDA, PSD view database.

2011]. How much Ukraine's exports or policies may influence world market depends on the commodity. Since Ukraine's barley exports are a higher share of total exports than for other grains, there would be more influence of Ukraine's actions on barley markets than on other commodities or total grains.

During 2010 Ukraine used export quotas to limit exports and protect domestic consumers, and there was a long policy conflict and debate about that. Since the 2011 harvest was much better, the Government abolished the export quotas, except for buckwheat and rye, and introduced export duties ranging from 9 to 14 percent on wheat, barley and corn. A recent analysis of the export duty policy concludes that the export duty is better but obviously not as good as having no export barriers [Gerasymchuk et al. 2011]. It is better than a quota because it allows world market prices and world demand to influence the domestic market. When foreign demand and prices rise, Ukraine can sell more and get higher prices and vice versa. Another advantage of the export duty is that the government gains revenue from the tax, while in the case of the quota, since the quota was not sold, the difference between the domestic and world price was a windfall gain to the traders who are fortunate enough to get a quota allocation. The export duties came into force July 1, and were abolished for wheat and corn on October 22, 2011, and for barley on January 1st, 2012. But a larger point is that such erratic policies add to producer risk and are likely to slow the growth of Ukraine's production and export potential.

## LAND STRUCTURE AND USE

Since the 1990s there has been a gradual shift in the land use from the state to the non-state and individual users as land was privatized (Figure 9). In 2008, 57 percent of the agricultural land was used by agricultural enterprises, including mainly agricultural partnerships and smaller portions to cooperatives, collective

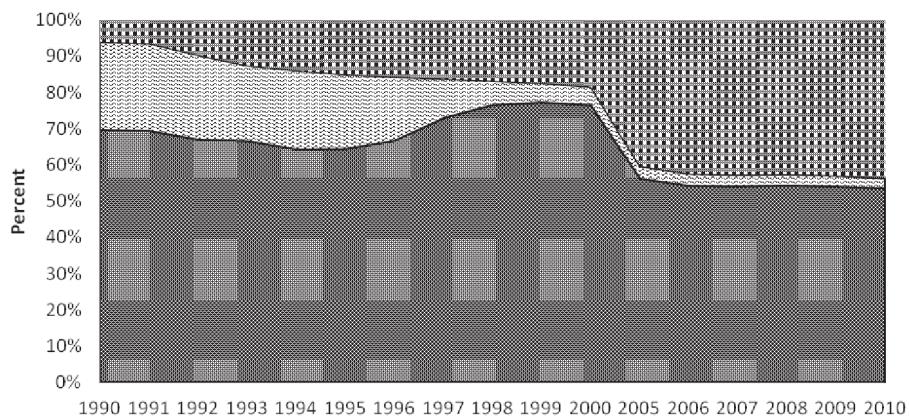


FIGURE 9. Distribution of Agricultural Land by User Group [%]  
 RYSUNEK 9. Podział gruntów rolnych między grupy użytkowników [%]  
 Source State Statistics Committee of Ukraine.

farms, state enterprises. The remaining 43 percent was in the hands of the individuals that leased it out or used it for gardens, some agricultural produce and pastures (Table 2).

TABLE 2. Agricultural land distribution, 2008  
 TABELA 2. Użytkownicy gruntów rolnych, 2008 rok

Specification	Total land area	Total Agricultural land
Total land area [ha]	60,354.8	41,675.9
Land of agricultural enterprises and individuals	38,275.8	36,801.5
Including:		
Land of agricultural enterprises	22,159.0	21,199.1
Including:		
Collective farms	159.7	101.8
State enterprises	1,378.3	1,177.0
Cooperatives	1,832.3	1,651.0
Agricultural partnership	10,345.8	10,002.8
Individuals	16,116.8	15,602.4
Other land users	22,079.0	4,874.4

Source: State Statistics Committee of Ukraine.

It is a bit difficult to separate the data for ownership and for use of the land, because most of the land is actually owned in small units based on the land privatization law. However, it is informative to see the distribution of operating farm by size and number, which shows that more than 50% of the farms are less than 50 hectares in size but more than 87 percent of the total sown area was in hands of enterprises of 500 hectares or more, 50% of the land is farmed in farms of 1000 hectares or more and almost a half in farms of 3000 hectares or more, which is up from 35 percent in 2008 (Table 3). Moreover, data from a private source (APK-inform) indicates of the 6.77 million hectares in large farms in 2008, 4.79 million was operated by 33 large agriholding companies with an average size of 155,000 hectares. This skewness in

distribution of farm size has likely increased by 2011. In fact, these agriholding operations have been growing rapidly, but there are no official statistics on them. The next section will focus on gaining a better understanding of this production and management structure in Ukraine.

TABLE 3. Distribution of agricultural producers and sown area by size, 2011  
TABELA 3. Producenci rolni według wielkości obszaru uprawianych gruntów, 2011 rok

Specification	Total number	%	Total sown area (1,000 ha)	%
Total number and area	48,256	100.0	21,570.6	100.0
Including:				
Area [ha] < 50.0	28,054	58.1	637	2.9
50.1–100.0	4,895	10.1	350	1.6
100.1–500.0	7,195	14.9	1,757	8.1
500.1–1,000.0	2,595	5.3	1,870	8.6
1,000.1–2,000.0	2,549	5.3	3,665	17.0
2,000.1–3,000.0	1,304	2.7	3,189	14.8
> 3,000.0	1,664	3.4	10,102	46.8

Source: State Statistics Committee of Ukraine.

## AGRIHOLDINGS

As seen in the data just presented, one of the recent trends in Ukrainian agriculture is the creation of large operating units through the leasing of many small plots that were formerly part of large state or collective farms. Some of these are individual farms run by a new breed of farming entrepreneurs who live in the village and maintain strong ties with the village. Agriholdings by contrast are the large farms (sometimes larger than 100,000 ha) that are usually vertically integrated with processors or exporters.

The majority of agriholdings have been formed in the grain sector, while some of them function in the oilseed, sugar and dairy sectors. According to FAO-EBRD [2009], „some of these farms have managed to attract financing through the placement of stocks on leading European stock exchanges, and borrowing from private investors or EBRD”. For example, between 2006 and 2008 Ukrainian agriholdings attracted through IPO more than 850 billion U.S. dollars [Sadovnik 2009].

Unfortunately, there are no official statistics sources on the number of agriholdings in Ukraine, or the amount of land in their use. A growing number of the studies, however, provide a useful approximation. For example, according to the FAO-EBRD study on grain markets in Ukraine, Russia and Kazakhstan [2009], there are 33 agriholdings in Ukraine that use almost 5 million ha.

The reasons for the investors' interest in the agriholdings are quite numerous. Among them are vast availability of relatively cheap and fertile land, sufficient level of infrastructure development, world market access, productive and relatively cheap labor, and finally, increasing commodity prices as a promise of higher profits. However, Demyanenko [2008] also points out that the major reason for the agriholdings to be a post-USSR (rather than a Western) phenomenon is the underdeveloped institutional and legislative conditions of the transition eco-

nomies that allow for large capital accumulation. As was mentioned earlier, there is a moratorium on the sale of land in Ukraine. This allows the owners of the agriholdings to rent a large amount of land at a relatively cheap rental rate. Moreover, there are cases where land contracts are secured and allowed to remain idle as the agriholding company uses the land holdings to attract investments in exchange markets. This is clearly not in the interests of the nation nor the small land holders and workers in rural areas. The leasing law should prevent this practice from continuing, but routinely such laws are not enforced.

The major benefit of the agriholdings is that they allow attracting a large amount of investment in the agribusiness sector both from domestic and international investors, which as was mentioned earlier in our study is crucial for increasing food production. Additionally, the economies of scale of the agriholdings allow them to decrease the cost and increase the efficiency of production, while the extent of their integration allows for the fast and smooth product movement from a farm to an exporter or domestic user. However, massive land holdings that are usually widely scattered geographically and not always well managed as farming enterprises are very likely to be more inefficient than holdings in the 10–20,000 hectare scale as shown in research by Demyanenko [2011]. In addition, the agriholding farming system is much more likely to engage in monoculture practices that lead to deterioration of land quality and other environmental externalities.

At the same time, there are a number of risks associated with the creation of such large farms. The main one is the disconnect between the agriholdings and the rural areas where they operate. Usually, the major offices of such holdings are located in the larger cities and not in the areas where the production takes place. Therefore, the agriholdings pay taxes to the cities, which decreases the stream of financing to the rural territories. In turn, this results in lower levels of financing of infrastructure and public goods provision in the rural areas of Ukraine. Additionally, some experts [Visser and Spoor 2011] fear that the emergence of agriholdings might be an example of "land grabbing" practices, where a big share of land is owned or under long-term lease by foreign or domestic investors. As a result, this might cause even further loss of revenues on the part of the local population.

## PROSPECTS AND CONCLUSIONS

The future role of Ukrainian grains in world markets will in part depend not only on growth in yields and productions but also on how much the livestock industry grows again. The decline in domestic grain use for feed was a major reason why Ukraine's grain exports increased (Figure 10). So far, only the poultry industry has shown a rapid resurgence, but if there is strong growth in livestock and/or dairy production, this might result in the shift grain use from exports to domestic feed use and even the shift of acreage to the production of fodder crops.

Using a very rough estimate at current yield levels, we can say that if the livestock industry were to grow back to the 1988 levels and use the same feeding

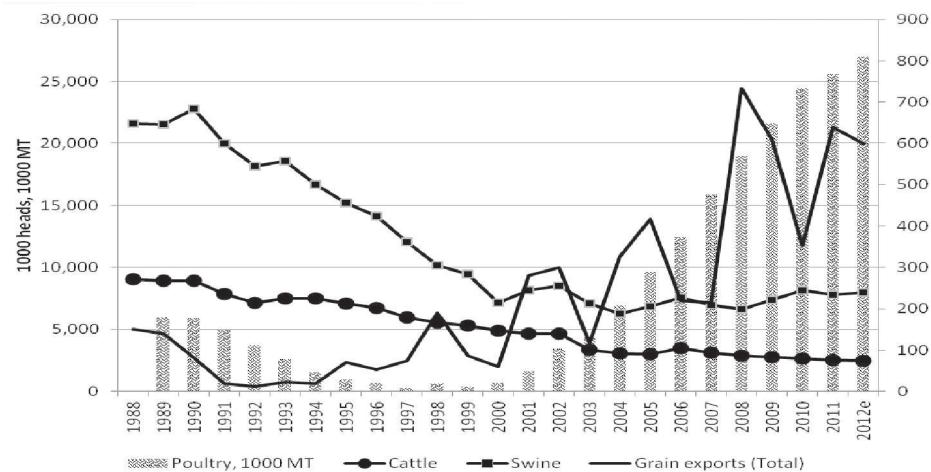


FIGURE 10. Livestock and poultry production relative to grain exports

RYSUNEK 10. Produkcja żywca i drobiu w odniesieniu do eksportu zbóż

Source: USDA, PSD view database.

rates, Ukraine would have only 2.1 million metric tons remaining for export, holding other factors constant. Of course, this is unrealistic in many ways but is used just to show the potential impact of the livestock sector on future grain export prospects.

Another possible scenario is a growth in the biofuels industry. As of now, the growth in this sector is in producing more rapeseed for export to the EU market. There is no current plan for a biofuels production growth in Ukraine, and selling the rapeseed to the EU processors is clearly a more attractive option for producers and for the government at the current time.

What about the area that has gone out of production since 1990? Cropland has declined by 5.3 million hectares during the last 20 years, and if current high prices are sustained it is likely that some of this will be economically viable to bring back to production. This takes time, but over a few years it could add to production potential. The key factor is whether the higher prices persist for a long enough period.

There is also the yield gap, which is quite significant; and higher prices will also help in providing incentives to improve management, inputs and seed stock. Ukrainian wheat yields are on average 2.43 MT/HA lower than those in the EU, so closing only half of this gap with the EU levels would create potential of increasing Ukrainian wheat production by almost 8,000 thousand MT. EU and US corn yields exceed Ukrainian ones by 2.5 and 5.5 MT/HA, respectively, so closing only half of these gaps would increase corn production by 3,250 or by 7,150 thousand MT. Barley yields in Ukraine are on average lower EU-27 yields by 2.1 MT/HA. Improving Ukrainian yields by half of this gap would increase production by 4,725 thousand MT (holding other factors constant). We use conservative 50 percent gap reduction goals as examples, because support levels and technology infrastructure are much less favorable in Ukraine compared with the EU and the US.

Finally, the Ukrainian agriculture sector has been plagued by erratic and often unfavorable government policies. It is hard to know if the policy uncertainty or the actual policies are more damaging to the industry, but both of them have the effect of increasing producer risk and reducing incentives to invest and improve management and inputs in agricultural production. It is not only the imposition of export quotas in 2010 or the on and off export duties of 2011, but the generally poor marketing infrastructure and costly transportation systems that hamper progress in the industry. The farm to port costs in Ukraine are estimated to be more than 50 percent higher than in comparable EU and US markets. And there is a very low attention to research and development in the agriculture research system.

The future for Ukraine agriculture can be really bright if market forces are allowed to operate without undue government interference and even more so if the government can provide more public goods in the form of improved marketing infrastructure, information systems and extension services. In the past, farmers have done remarkably well considering the unfavorable policy and market conditions, so the entrepreneurial talent and the natural resources are not the constraint but rather the policy and business environment are the limitation.

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## **UKRAINA W KRU (KAZACHSTAN, ROSJA I UKRAINA): PERSPEKTYWY UKRAIŃSKIEJ GOSPODARKI ZBOŻOWEJ**

**Abstrakt.** Do czasu suszy, jaka nawiedziła Rosję w 2010 roku, udział eksportu zbóż z Kazachstanu, Rosji i Ukrainy (KRU) w światowym handlu zbożem wykazywał stały wzrost. W latach 2008/2009 oraz 2009/2010 kraje te razem eksportowały średnio 36,5 mln ton pszenicy rocznie, co stanowiło ponad 26% światowego eksportu pszenicy w tych dwóch latach. Była to ilość przewyższająca poziom eksportu każdego z pozostałych dużych dostawców pszenicy – USA, Kanady, UE-27 oraz Australii. Z uwagi na rosnącą rolę sektorów zbożowych w regionie KRU istotne jest dowiedzenie się czegoś więcej o roli Ukrainy w zachowaniach rynku globalnego. W niniejszej pracy koncentrujemy się na specyficznych cechach rolnictwa ukraińskiego, jego rosnącej integracji z rynkami światowymi oraz potencjalnej roli w przyszłych wydarzeniach na rynku zbożowym.

**Słowa kluczowe:** rolnictwo ukraińskie, eksport zbóż, struktura ziem, gospodarstwa rolne, polityka rolna i handlowa