

# Improving Agricultural Fiscal Policy in Ukraine

*The World Bank*

*June 20, 2006*

*Paper prepared for the Public Finance Review of Ukraine, 2005-2006 (\*)*

## EXECUTIVE SUMMARY

This paper evaluates the past and current agricultural fiscal policies in Ukraine. The main findings and messages include the following:

***Despite increased fiscal spending, the agricultural sector in Ukraine continues to perform below its potential***

- Fifteen years into transition, agriculture in Ukraine still faces structural challenges that squeeze farm profitability and lower the welfare of people directly and indirectly dependent on agriculture. There is a strong justification for public spending to help overcome these structural problems and stimulate agricultural growth. This is necessary because cross-country comparisons indicate that public expenditures in growth-enhancing programs such as agricultural research and development, extension services, education, rural infrastructure, food safety and quality systems, and rural development are the most important drivers of agricultural growth and competitiveness.
- Although fiscal spending on the agriculture sector in Ukraine substantially increased (from 0.3 billion Hrv. in 2000 to 9.8 billion in 2005, or from 1 to 2.5 percent of GDP, respectively), the focus of this spending has largely remained on subsidies rather than on growth-enhancing investments (in 2005, subsidies accounted for 75 percent of total fiscal support). Since Ukraine's fiscal spending on agriculture is at the same level as that in middle-income countries and even some high-income countries, the primary goal of policymakers in Ukraine should be focused on improving the effectiveness and nature of public spending on agriculture, rather than on increasing its level.
- To capture the full growth potential of agriculture, the government faces three key policy challenges. First, it needs to create the conditions for the emergence of an enabling policy environment. Second, it should move away from market-distorting measures that undermine the long-run competitiveness of the sector and focus its fiscal resources on resolving the structural constraints faced by agriculture and rural areas. And third, it should improve the quality of growth-enhancing support programs that will meet the evolving needs of private agriculture and the food processing sector.

***A supportive environment for agricultural development should be created***

- At present, the public spending on agriculture in Ukraine barely compensates for the losses imposed on farms by the prevailing price and trade policies, because the latter policies depress the farm-gate prices and thus cancel out the large fiscal support. Improving the policy regime for agriculture therefore represents a first and necessary step to enhance the effectiveness of public spending on agriculture.

1. \_\_\_\_\_

\* This paper was prepared by Sergiy Zorya, YPP, ECSSD/ECA, The World Bank.

- Policy measures at the border, such as export taxes on oilseeds and live cattle and export VAT arrears, directly reduce the farm-gate prices. Beyond the border, ad hoc domestic market interventions, control over food prices and margins, restrictions on the inter-oblast movement of agricultural commodities, and excessive food safety and SPS regulations raise the cost of doing business by increasing uncertainty, reducing competition and discouraging private investments. These factors increase marketing costs and trade margins, which result in lower farm-gate prices.
- Another reason for low farm-gate prices is high marketing costs along the food chains. Ukraine inherited serious structural inefficiencies from the Soviet Union which resulted in high transportation, storage, seaport handling, food safety and quality assurance, and other costs. The government needs to invest more in public infrastructure and improve the quality of public services provided to the private sector. At the same time, the government should improve the investment climate by building its partnership with the private sector and avoiding ad hoc interventions in food chains to attract more private investment.
- Thus, spending more on agriculture without improving agricultural policy would be economically inefficient and fiscally unsustainable. Improving policy will contribute greatly to restoring the profitability of agriculture and the incentive for private investment and growth in the sector. The first set of measures is intended to remove the obvious policy interventions. These measures can be implemented at little or no fiscal costs.
- The second set of measures would target the structural constraints to well-functioning agricultural markets. These measures would involve public investments targeted to the provision of public goods such as an agricultural knowledge system, food safety and quality, and the dissemination of information, and would involve improving the business environment to attract more private investment in the marketing infrastructure and improve the management of those public organizations that provide services to the private sector, such as transportation, licensing, inspections, and certification.

***Fiscal spending needs to be shifted away from subsidies to the programs most relevant to the objectives of public support***

- During 2000-05, fiscal spending on agriculture was dominated increasingly by subsidies, stemming from budget and tax expenditures. In 2005, total agricultural subsidies increased to 7.3 billion Hrv. from 1.2 billion in 2000. Subsidies financed from both VAT and budget expenditures supported agricultural production, especially livestock production, and lowered the costs of major inputs.
- Most subsidies have suffered from an unequal allocation in the course of the year and from lack of transparency in eligibility criteria and selection processes. The efficiency of budget allocations and VAT expenditures continued to be judged by changes in nominal output or input use, while attention to changes in agricultural productivity and farm incomes, as a result of specific government programs, remained very low. At the end, most subsidies were likely to have encouraged higher production of targeted products or to have increased the use of subsidized inputs, but they did not necessarily support the investment that was urgently-needed to increase agricultural competitiveness.
- Moreover, the subsidies have had a pervasive adverse effect on long-term farm competitiveness, income distribution within the sector, macroeconomic fundamentals, and the opportunity costs of civil servants of the Ministry of Agricultural Policy. As most subsidies had the character of private rather than public goods, there is a strong justification for phasing them out, including the VAT expenditures.

- The anticipated WTO membership should be considered not as a threat but as an opportunity to move from ‘amber’ to ‘green box’ support measures. Most subsidies should be phased out and replaced by public expenditure in farm investment programs, public goods and rural development.
- The Ministry of Agricultural Policy should design the investment programs for agriculture and should more actively coordinate rural development at national level. Investment programs should function as competitive grants which co-finance the investments of farms financed both from own resources and from borrowed capital. Rural development is extremely important for agricultural growth, to free agricultural enterprises from the provision of social responsibilities and foster the creation of non-farm jobs, but also to provide the needed rural infrastructure that plays a large role in fostering agricultural growth and competitiveness

***The quality of growth-enhancing investments needs to be improved***

- An increase in financing growth-enhancing measures alone, however, will hardly increase the returns of public investments if the weaknesses in the delivery of public services are not addressed. During 2000-05, Ukraine experienced a fivefold increase in the financing of potentially growth-enhancing investment, and there is a strong justification for financing the delivery of many public goods from the budget. But although international experience points to a substantial impact of such public investment on agricultural growth and competitiveness, their impact in Ukraine has not been as high as elsewhere. While some of this limited impact reflects an overall policy environment that does not encourage growth and competitiveness, it also reflects weaknesses in the way these potentially important support programs are financed, managed and implemented.
- Many public services have a public nature and thus merit public finance. Hence, the public sector would need to continue to finance those services that generate important benefits for the society as a whole. At the same time, the efficiency of public institutions should be improved by the development of clearly defined performance standards for the provision of public services which are agreed as a part of the annual budget review process and form the justification for the budgets provided.
- At the same time, the public agencies should be disengaged from commercial activities, particularly those that compromise their ability to carry out regulatory functions. Public sector programs should avoid competing with private services and should facilitate the delivery of many private services of a public nature by developing the appropriate legislation and providing the enabling policy framework.
- The agricultural sector is taxed by the absence of a well-functioning futures market, agricultural insurance, extension services and modern food safety and quality assurance systems. The public sector should play an important role in facilitating the delivery of these services by not substituting private sector but providing technical support to private providers, developing public-private partnerships for service delivery, sharing information, coordinating activities with private service providers, and establishing mechanisms for the accreditation of private services. Only then will public investment in public goods pay off and have a significant impact on long-term agriculture growth.

# 1 Introduction

1. **Agriculture's importance to the economy in Ukraine is both deep and diverse.** Agriculture is one of the Ukrainian economy's key sectors, accounting for 11 percent of GDP and 22 percent of total employment. Together with the food processing industry, its contribution to GDP and the employment increases to 20 percent and 28 percent, respectively. Agriculture is particularly important in rural areas where it is often the only source of gainful employment and income. In addition, through its impact on food prices, the agro-food complex has a critical influence on the cost and standard of living in urban areas, in particular for the vast majority of the population with median and below-median incomes.

2. **Fifteen years into transition, the Ukrainian agricultural sector still faces structural challenges which squeeze farm profitability and lower the welfare of people directly and indirectly dependent on agriculture.** Agriculture is divided into very large enterprises with several thousand hectares of land and small-scale household farms with one hectare of land and two to three cows. The latter dominate the production of livestock products and of fruits and vegetables, and their share in gross agricultural output reaches 60 percent. The dependence of the household farms on cross-subsidization from large farms, however, raises concerns about their economic sustainability.<sup>1</sup> Investments in farms remain limited, in part because of high interest rates but also because of poor collateral base and low farm profitability. Agricultural markets for agricultural inputs and outputs remain poorly organized, which results in high costs for inputs and low farm-gate prices for outputs. Land reform is not been completed and many agricultural enterprises have not yet been restructured and continue to carry the financial burden of providing social services and employment obligations for local communities.

3. **The traditional requirement for agricultural enterprises to provide social services in rural areas hinders their ability to perform as commercial entities.** As in the past, large farms continue to be the primary providers of social services and jobs. Legally, the social assets and the responsibility for the provision of public services in rural areas have been transferred to the local municipalities. In practice, however, the capacity of the local municipalities to assume these functions remains weak because of the inadequacies of the fiscal decentralization framework and the limited management capacity of local authorities. This leaves the large farms with no choice but to continue supporting the villages, which raises their costs for labor monitoring significantly, takes the farm managers' time away from productive activities and slows down the establishment of a well-functioning fiscal decentralization and local administration model for the entire country. Under these conditions, the enabling environment for a low-cost and efficient agriculture sector is missing. As a result, Ukrainian agriculture is in a "vicious cycle" where low farm profitability, social services and employment obligations prompt the government to subsidize large farms through production support and recurrent bailouts, providing few incentives and opportunities for large farms to restructure into efficient and competitive farm units.

4. **Agricultural fiscal policy has an important role to play in overcoming the structural problems and breaking the vicious cycle.** Cross-country comparisons indicate that public expenditures on public goods, such as agricultural research and development, extension services, education, rural infrastructure, and food safety and quality systems are the most important drivers of agricultural growth and competitiveness. These growth-enhancing public expenditures bring about the highest returns and at the same time stimulate private investment in agriculture. Moreover, international experience shows that, because agriculture depends on the development

1. \_\_\_\_\_

<sup>1</sup> Nedoborovsky (2004) shows the high dependence of household farms' economic performance in Ukraine on low-priced inputs, mainly feeds, obtained as benefits from employment in the large agricultural enterprises.

of rural areas, local authorities should be empowered to fulfill their roles in supporting rural areas, and rural development programs should be coordinated among different public institutions at the national level.

5. **Recently, the Government of Ukraine has significantly increased its financing of agriculture.** Fiscal spending, including both budget expenditures and fiscal advantages granted to agriculture through the taxation system (i.e., VAT expenditures), grew to 9.8 billion Hrv. (US\$ 1,914 million) in 2005 from 1.6 billion Hrv. (US\$ 294 million) in 2000.<sup>2</sup> During 2000-05, fiscal spending on agriculture equaled around 2 percent of GDP and 6 percent of total budget expenditures. But in 2005 agricultural fiscal spending accounted for 8.6 percent of total budget expenditures and 2.5 percent of GDP (Table 3). In 2006, fiscal support to agriculture is expected to increase to about 12 billion Hrv. The actual support to agriculture is even higher if non-fiscal support measures are taken into account.<sup>3</sup>

6. **International comparison shows that Ukraine's fiscal spending on agriculture is at the same level as that of middle-income countries and even some high-income countries.** The share of agricultural fiscal spending in total GDP (adjusted by the size of agriculture) in Ukraine is broadly within the range of that the most middle-income countries and even greater than that of Australia (Table 1). The example of Brazil, which increased agricultural exports from US\$ 6 billion in 1993 to US\$ 17 billion in 2003 and which keeps expanding its exports at competitive prices and quality, proves that significant agricultural growth is achievable in a low fiscal support environment.<sup>4</sup> Fiscal spending in Ukraine is lower than in the United States and the EU, and this is consistent with the more limited fiscal capacities of Ukraine relative to high-income countries. These international comparisons suggest that the primary goal of agricultural policymakers in Ukraine should be focused more on improving the effectiveness and nature of fiscal spending on agriculture rather than on increasing its level.

1. \_\_\_\_\_

<sup>2</sup> The average exchange rate was 5.44 Hrv./US\$ in 2000 and 5.12 Hrv./US\$ in 2005.

<sup>3</sup> In addition, agriculture is supported by import tariffs but also by a number of other domestic support measures. These measures are (i) sugar quota, (ii) support of grain prices through pledge and intervention purchases, (iii) benefits from a low interest rate for machinery leased from UkrAgroLeasing, and (iv) the agreements with supply companies to provide fuel and fertilizers at lower than market prices. The annual value of these subsidies is estimated to have been at least 1 billion Hrv. on average during 2000-05 and around 2 billion Hrv. alone in 2005 (see Nivjevskiy, 2006).

<sup>4</sup> According to Tangermann (2006), the gross agricultural output in Brazil almost doubled between 1989 and 2003, while the farm support level during 2000-03 was at a low 3 percent of farm gross income and 0.7 percent of GDP.

**Table 1: International Comparison of Fiscal Transfers to Agriculture, Average for 2002-04**

Countries	Agriculture as a share of GDP	Share of agricultural fiscal expenditures in national GDP	Share of agricultural fiscal expenditures in GDP adjusted to the size of agriculture
	<i>A</i>	<i>C</i>	<i>C/A</i>
Ukraine (budget expenditures)	11.6%	1.3%	0.11
Ukraine (total fiscal expenditures, including VAT expenditures)	11.6%	2.1%	0.18
<b>High-income countries</b>			
Australia	3.0%	0.31%	0.10
Canada	2.3%	0.51%	0.22
EU	2.3%	0.65%	0.28
U.S.	1.6%	0.73%	0.46
<b>Middle-income countries</b>			
Turkey	13.0%	2.0%	0.15
Mexico	4.0%	0.7%	0.18
Venezuela	5.0%	0.5%	0.12
China	15.0%	1.2%	0.08
Brazil	9.3%	0.7%	0.08
Russia	6.0%	0.95%*	0.16

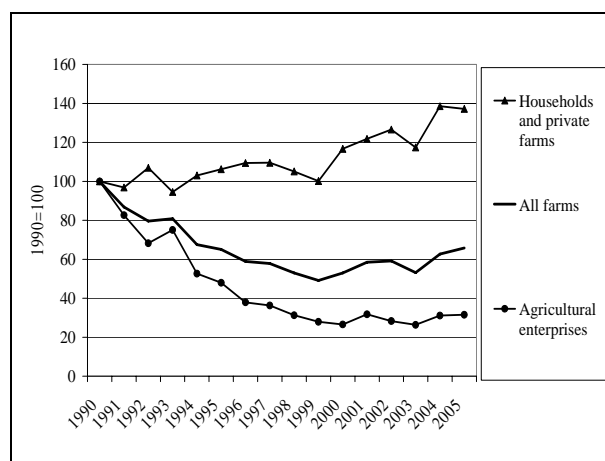
*Note:* The reference year for Russia is 2003.

*Source:* OECD (2004), World Bank (2005a) and Tangermann (2006).

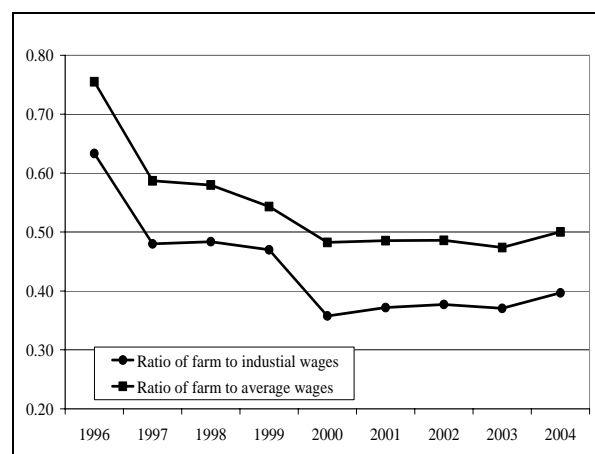
7. **Despite the significant fiscal resources it absorbs, the agriculture sector in Ukraine has performed below its potential.** Agricultural output has been growing since 2000, but its level remains low (Figure 1). In 2005, the output of the large agricultural enterprises was only 30 percent of that in 1990 in spite of the fact that they operate on roughly 70 percent of total agricultural land. The agricultural production level is extremely dependent on weather conditions because of the lack of modern farm production technologies and poor farm management. Crop yields and livestock productivity remain low, and around 50 percent of the large enterprises keep making losses. As a result, agricultural wages remain among the lowest in the economy. In 2004, the nominal average agricultural wage was reported to be 3,500 Hrv. per year, while the average wage of non-farmers reached 7,000 Hrv. and that of industrial workers reached 9,000 Hrv. Despite the almost twofold increase of the agricultural wages in nominal terms during 1999-2004, the gap between farm and non-farm wages remains large (Figure 2).

8. **To capture the full growth potential of agriculture, the government would need to face three key policy challenges.** First, the government would need to create the conditions for an enabling policy environment to emerge. Second, the government should move away from subsidies which underpin the long-term farm competitiveness and focus its fiscal spending on resolving the structural constraints that agriculture faces. And third, there is significant scope for improving the quality of growth and competitiveness-enhancing support programs to meet the evolving needs of private agriculture and the food processing sector.

**Figure 1: Gross Agricultural Output, 1990-2005**



**Figure 2: Farm Wages versus Industrial and Average Wages, 1996-2004**



Source: State Statistics Committee of Ukraine (various issues).

## 2 A Supportive Environment for Agricultural Development

9. **Currently, fiscal spending on agriculture in Ukraine barely compensates for the losses imposed on farms by the prevailing price and trade policies.** A 2004 World Bank and OECD joint study showed that, despite a large amount of fiscal spending on agriculture, the level of aggregate farm support actually provided to agriculture has been low (Table 2). This is reflected in the Producer Support Estimate (PSE), which equaled -385 million Hrv. or -1 percent of gross farm incomes during 1999-2003.<sup>5</sup> The PSE measures the level of farm support stemming from both consumer (market price support) and public (budget expenditures) transfers. The total market price support was negative, meaning that farm-gate prices were depressed, being below the reference border prices.<sup>6</sup> As a result, the significant public transfers from the budget to the farms only just compensate farmers for these low prices, resulting in a total farm support that is close to zero. In short, the agricultural policy regime and public spending on agriculture operate at cross-purposes, canceling each other out, and result in a very low level of support despite the significant fiscal resources being mobilized for the development of agriculture. Improving the policy regime for agriculture represents a first and necessary step toward improving the effectiveness of public spending on agriculture.

1. \_\_\_\_\_

<sup>5</sup> Despite the availability and usefulness, the PSE estimates are rarely used in agricultural policy analysis in Ukraine. The latest PSEs available for Ukraine are for the year 2003. See the details on international comparisons for Ukraine's PSE in Zorya (2005a) and Zorya (2005b).

<sup>6</sup> There are many studies describing in detail the reasons for low farm-gate prices in Ukraine, including EBRD and FAO (2005) for sunflower seeds, von Cramon-Taubadel (2001) and von Cramon-Taubadel (2004) for grain, and IER (2003) for milk and dairy products.

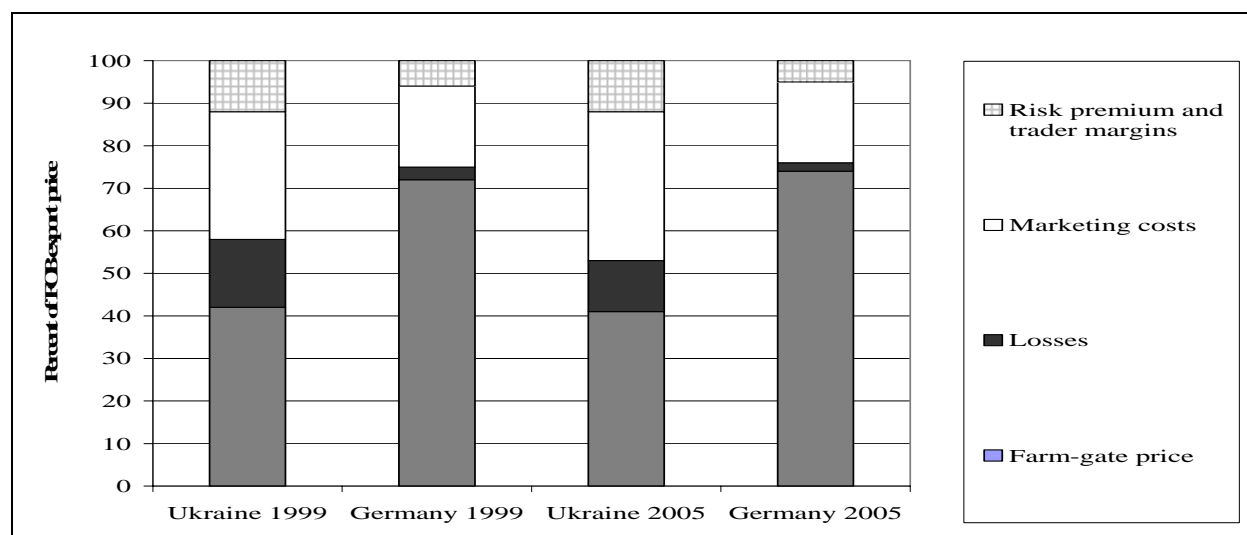
**Table 2: Producer Support Estimate in Ukraine, 1999-2003**

	1999	2000	2001	2002	2003	Average
Producer Support Estimate (PSE), million Hrv.	-1,107	-848	2,429	-3,079	679	-385
Including: Market price support	-4,247	-3,252	-493	-6,987	-3,962	-3,788
Budget expenditures*	3,139	2,404	2,922	3,908	4,640	3,403
Share of PSE in gross farm income, %	-3.2	-1.7	4.1	-5.5	1.1	-1.0

Note: \* Budget expenditures here differ from those presented in this report.

Source: World Bank and OECD (2004).

10. **Border and behind the border policies depress agricultural prices and squeeze farm profitability.** Policy measures at the border, such as export taxes on oilseeds and live cattle, and export VAT arrears, directly reduce the farm-gate prices. In addition, ad hoc domestic market interventions, control over prices and margins for grain, meat and other products, and restrictions on inter-oblast movements of agricultural commodities raise the cost of doing business by increasing uncertainty, reducing competition, increasing transaction costs and discouraging private investments.<sup>7</sup> Uncertainty increases the risk premium that traders and food processors must include in their margin calculations when negotiating with farms to purchase agricultural products. Food operators are also burdened by excessive food safety regulations through multiple inspections, arbitrary compliance procedures with food safety and quality standards and a weak quality assurance arbitrage system. This increases marketing costs and trade margins and thus results in lower farm-gate prices. An example concerning grain is shown in Figure 3, where in 1999 the farm-gate price of grain in Germany accounted for 70 percent of the FOB export price, while in Ukraine it accounted for only 40 percent. In 2005 the bridge between domestic and world market prices in Ukraine remained extremely long, mainly as a result of inconsistent interventions in the grain market, which resulted in increased marketing costs and trade margins.

**Figure 3: Costs of Trading Grain in Ukraine and Germany, 1999 and 2005**

Source: German Advisory Group on Economic Reforms in Ukraine (unpublished report).

11. **Another reason for the high marketing costs and thus, the low farm-gate prices is the structural problems along the marketing chains.** Ukraine inherited serious structural

<sup>7</sup> Almost every year, but especially in years of low grain harvests, many oblast administrations ban the movement of grain outside their oblasts to ensure the oblast's food security. This is essentially a quasi-fiscal transfer from poor rural to richer urban areas. In addition, it makes the grain trade, especially its exports, unpredictable and thus risky, and results in the weak spatial integration of grain prices in Ukraine.

inefficiencies along the food chains from the Soviet Union such as high transportation, storage and seaport handling costs, which increase the marketing costs and thus reduce the farm-gate prices. The government should improve the business environment to attract more private investments in the marketing infrastructure and should improve the management of the public (often monopolistic) organizations which provide services to the private sector, such as transportation, licensing and certification. In addition, the government should invest in public goods such as an agricultural research, the dissemination of market information, food safety and quality systems and extension services to ensure that the private sector is served with low cost and high quality services. Otherwise, marketing costs will remain excessive and will continue to hamper farm profitability.

**12. Intervention and pledge purchases of grain are examples of public policies which produce high uncertainty and delay the actions needed to reduce marketing costs.** In recent years, the government has attempted to affect the prices of agricultural products, especially wheat, by making purchases under the pledge and intervention programs. Generally, these attempts have been unsuccessful because of the low budget allocations (see Annex Table A1). In 2006, the budget allocated 685 million Hrv. to make the interventions through the state-managed Agrarian Fund, but despite the increased purchase of grain for the public stocks this action is unlikely to have a significant effect on prices. Such programs can have an effective impact on prices only if the producers are allowed to sell unlimited quantities of grain to the state, but not some limited amount. While the price effect remains rather uncertain, these programs have strong negative side effects on the market, and with the increased budget these effects become even stronger. The first problem concerning grain interventions and pledge operations is that they are fiscally costly. In 2006 they will account for 9 percent of total agricultural budget expenditures. Second, the decisions to intervene are based on imperfect information and are influenced by political considerations. Therefore, they often result in policy failures which exaggerate the existing problems. Third, the more purchases are made, the less market participants are certain about the available stocks and future actions of government at the local and national levels. And fourth, the public purchases divert the attention of the Ministry of Agricultural Policy from resolving the causes of low prices in the aftermath of harvest and high price fluctuations in Ukraine. Actually, by purchasing grain for the public stocks, the government attempts to compensate the low rates of grain stored in private silos by agricultural producers. Agricultural producers do not store grain but try to sell it in the aftermath of the harvest for the following reasons:

- Liquidity constraints. Farmers are pushed to sell grain immediately after the harvest to repay their debts to commercial banks and to finance the fall seeding campaign. While this is a problem, it should be resolved by completing the establishment of a well-functioning warehouse receipt system rather than by costly grain interventions. In Ukraine, the warehouse receipts remain risky securities. It is necessary to complete the legislation and create the indemnity fund to guarantee the receipts' security.
- The costs of storing grain (both physical and transaction) are high. In part, this can be explained by low private investment in the storage facilities, but also by high storage costs in the non-privatized storage silos.
- Price uncertainty. Even if agricultural producers decide to pay high storage costs, in the current environment they cannot predict future prices to be sure that a future price will cover a current price and storage costs. The absence of a well-functioning private-based agricultural futures exchange leads to the weak predictability of future prices. The newly created state-owned Agrarian Exchange is a typical commodity exchange for spot but not futures contracts. Thus, a private futures exchange is needed because the agricultural producers will store grain only if they can predict a future grain price and only if this future price will exceed the current price plus storage costs. Although grain prices in the

spring in Ukraine are usually much higher than in the first months after the harvest, high price uncertainty discourages agricultural producers from storing grain today to receive a greater price (minus storage costs) tomorrow. In conclusion, the current interventions in grain market and public purchases address neither of above-described reasons for low private storage, but instead they distort prices, crowd out the development of a private-based futures exchange market, and crowd out private investment in storage infrastructure.

13. **Spending more on agriculture without improving policy would be economically inefficient and fiscally expensive.** Improving the policy regime will go a long way towards restoring the profitability of agriculture and the incentives for private investment and growth in the sector. One set of measures that would improve the policy regime should be to address and remove the obvious handicaps to agricultural development such as direct price interventions, export taxes, regional barriers to trade, export VAT arrears and excessive regulatory costs. These measures are possible to implement at little or no fiscal costs.

14. **The second set of measures would target the structural constraints to well-functioning agricultural markets.** These measures would involve public investments and expenditures targeted to the provision of public goods which are essential to the well-functioning and competitive agricultural markets. International experience shows conclusively that such public expenditures bring in the highest returns and that is why they are called growth-enhancing investments. These investments would include, for example, expenditures on rural and market infrastructure, land market infrastructure, the provision of market information, modernized and improved food safety system and controls, and transparent and rule-based public interventions on agricultural commodity markets. These investments would facilitate innovation and the modernization of agricultural markets so that the marketing and transaction costs would be as small as possible. The World Bank has been assisting the Government of Ukraine in increasing the investments in these public goods along and providing improved legislation and a supportive policy environment (see Box 1). However, the government would need to strengthen the efforts to allow the efficient implementation of these World Bank projects. Improving the policy regime in agriculture through policy interventions and public spending that targets the structural constraints to the development of markets would significantly raise the effectiveness and the impact of public spending on agriculture and would make it possible to crowd-in private investments in the agriculture sector and marketing infrastructure.

### **Box 1: The World Bank's Agricultural Projects in Ukraine**

Currently there is only one on-going World Bank agricultural project in Ukraine, namely the **Rural Land Titling and Cadastre Development Project**. This project began in 2004, and its objectives are to allocate land parcels to individuals in rural areas on an equitable basis, establish their property rights by issuing state deeds for land, encourage the restructuring of farms into more efficient units, and establish a cadastre and title registration system where rights to immobile property could be registered. This project is critical in Ukraine in order to provide farmers with leverage to finance investments, in addition to having a variety of important poverty reducing implications.

Another project, the **Agricultural Competitiveness and Food Safety Project**, is currently under preparation. This project aims to increase the domestic and international competitiveness of the agri-food sector by: (i) strengthening Ukraine's national food safety and quality system, (ii) increasing the efficiency of the food supply chains, and (iii) establishing the quality culture in the food supply chains. Component *i* will facilitate legislative and institutional reforms, improve the work of inspection services, modernize the infrastructure of food safety and quality laboratories and organize information and training activities. The objective of this component is to increase the efficiency and effectiveness of Ukraine's national food control systems to protect the health and safety of domestic consumers, assure the safety and quality of the country's agri-food products to enable primary producers and food processors to enter high-value international markets, and ensure that imported foods conform to national requirements. Component *ii* will improve supply chain price formation and reduce transaction and transportation costs in the supply chain by establishing fresh produce wholesale and livestock markets and by facilitating the creation and functioning of a warehouse receipt indemnity fund and futures exchange on a private basis. Component *iii* will support the further development of an effective and integrated system able to link sources of information and advice to the needs of the various actors along the food supply chain, from primary producers to processors and traders.

## **3 Shifting Fiscal Spending to the Programs Most Relevant to the Objectives of Public Support**

15. **Public spending would have a greater impact on agriculture if fewer public resources were allocated to subsidies or "private goods" and more to "public goods".** International evidence suggests the negative impact on agricultural income of an inadequate mix of public expenditures, biased towards subsidies (see Box 2). In Ukraine, fiscal spending on agriculture has stemmed from two sources: the budget and tax expenditures (i.e., VAT exemptions granted to the agricultural sector). Table 3 shows three negative trends. First, fiscal spending on agriculture is increasingly dominated by subsidies. Second, the subsidies, stemming from tax expenditures, have grown more rapidly than those stemming from budget expenditures and, as a result, budget expenditures now account for about 55 percent of total fiscal spending on agriculture compared to 70 percent in 2000. Second, this shift towards tax expenditures and the falling importance of budget expenditures is not a welcome development since it provides much less transparency in the decision-making process for allocating scarce public resources in support of agriculture. And third, the share of growth-enhancing investments in total fiscal spending decreased from 39 percent in 2000 to 35 percent in 2005 in spite of their fivefold nominal growth.

### Box 2: Importance of the Public Expenditure Mix in Rural Areas of Latin America

Using data from ten Latin American and Caribbean countries for 1985-2000, López (2005) investigated the impact of total public expenditure and its mix on agricultural per capita income, controlling for trade openness and the per capita GDP share of the non-agricultural sector. The major finding is that public expenditures have a positive effect on agricultural per capita income, but the structure or composition of such expenditures is very important. A reallocation of 10 percentage points of total public expenditures from subsidies to public goods would increase per capita agricultural income by 2.3 percent, and **this is obtained without increasing total expenditures**. By contrast, increasing public expenditures (without changing their composition) is much less effective in raising per capita agricultural incomes: a 10 percent expansion of government outlays causes on average only a 0.6 percent increase in agriculture income. These impacts are large mainly because they capture both the positive effect of increasing the provision of public goods and the positive effect of reducing the distortions created by subsidies, which negatively affect the quantity and quality of private investment. In this study the public goods expenditures include those on technology generation and transfers, soil conservation, sanitary and phytosanitary protection, communications and information services, rural infrastructure, and social services (for example, education and health). For private goods, expenditures include commodity-specific subsidies, marketing assistance and promotion, subsidized credit, and irrigation.

**Table 3: Fiscal Spending on Agriculture in Ukraine, 2000-05 (million Hrv.)**

	2000	2001	2002	2003	2004	2005
Subsidies, stemming from:	1,1711	2,756	2,956	3,825	5,652	7,318
Budget expenditures	688	1,1131	1,163	1,650	2,687	2,962
Tax expenditures	483	1,626	1,792	2,175	2,965	4,356
Growth-enhancing investments	478	585	1,085	2,051	1,895	2,439
<b>Total fiscal expenditures</b>	<b>1,649</b>	<b>3,341</b>	<b>4,040</b>	<b>5,876</b>	<b>7,546</b>	<b>9,757</b>
Share of fiscal expenditures in GDP, percent	0.97	1.64	1.79	2.20	2.19	2.49
Share of fiscal expenditures in total public expenditures, percent	3.43	6.02	6.70	7.74	7.44	8.55

Source: Own estimations based on the data from the Ministry of Finance and Laws on Budget of Ukraine.

## 3.1 Tax expenditures

16. **Tax expenditures on agriculture, coming from VAT exemptions, remain large compared to other sectors of the economy.** Four major types of VAT expenditures are granted to agriculture (Figure 4)<sup>8</sup>:

- VAT charged from sales of agricultural products stays on farm accounts to be used to purchase production inputs
- VAT charged from sales of meat and dairy products is not paid to the budget by processing plants, but returned to primary milk and meat agricultural producers
- VAT charged from sales of dairy and meat products produced in on-farm processing capacities stays on farm accounts to be used for livestock support
- Milk and meat sold by agricultural producers is taxed at zero VAT rate.

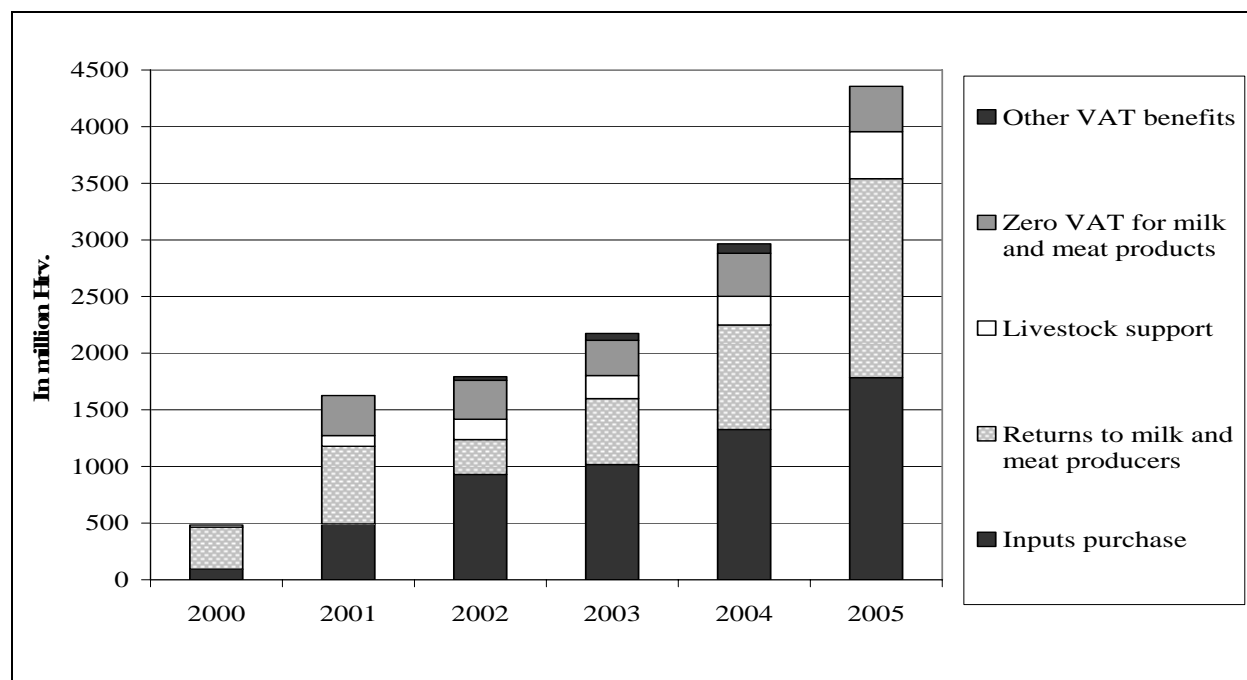
17. **The VAT expenditures have been growing continuously.** In 2005 total VAT expenditures increased to 4.4 billion Hrv. from 0.5 billion Hrv. in 2000, which equaled, on average, 0.8 percent of GDP during 2000-05 and 1.1 percent of GDP in 2005. Since 1999, the

1.

<sup>8</sup> Agricultural producers have also benefited from overdue payments of taxes and tax debt write-offs (in the years 2000 and 2001). These benefits are not shown in Figure 4, but described in Nivjevskiy (2006).

agricultural sector has remained the largest beneficiary of VAT expenditures in the economy. From 2000 to 2005, farms accumulated about 14 billion Hrv. in such benefits. In 2005, up to 60 percent of total VAT expenditures (estimated at 1.8 percent of GDP) in the economy were granted to agriculture.<sup>9</sup>

**Figure 4: VAT Expenditures Granted to Agriculture, 2000-05 (million Hrv.)**



Source: Own estimates based on data from the Ministry of Finance of Ukraine.

18. **The VAT expenditures have had an adverse impact on agriculture, in large part because they undermine long-term farm competitiveness.** The VAT expenditures can be divided into those subsidizing inputs' purchase and those subsidizing livestock production (last three from paragraph 14). These subsidies, especially livestock support, are highly distortive because they stimulate greater production as a reaction to subsidies rather than market developments and the comparative advantages of farms producing these products. At the same time, more market-compatible responses for dealing with the insufficient production of livestock products are overlooked. These responses would include easing import regulations on breeding stock, improving the domestic breeding system, dealing with the chronic shortage of quality protein feeds and providing investment grants to agricultural producers. Subsidies could stimulate higher production but they do not improve competitiveness and do not necessarily support investments in the improved quality of milk and meat, which are urgently needed in order to increase the competitiveness of agricultural producers and to enable food processors to sustain their position in internal and foreign markets.

19. **The VAT expenditures have had other negative effects.** The major ones are the following:

- **VAT expenditures have increased income inequality within the agricultural sector, providing most benefits to a small group of larger farms.** Table 4 shows the distribution of subsidies (consisting of mainly VAT expenditures, but also direct budget expenditures) among livestock producers in 2004. Only 7 percent of the farms received 75 percent of all subsidies! This is explained by the coupling of the VAT expenditures with production (the more you produce the more subsidies you receive) and a biased

1. \_\_\_\_\_

<sup>9</sup> See World Bank (2005b).

distribution of limited budget resources to the well-connected farm managers. While the share of subsidies in the gross income of livestock producers was 3.8 percent on average, the small privileged group of large farms received 10.4 percent of their gross income from the state. This is the statistics for large farms. Regarding individual producers, there is the information that many of them did not receive the VAT returns from the processing plants in spite of being eligible.<sup>10</sup> Thus, the net benefits to agricultural producers, especially the small livestock producers, from the VAT expenditures have been much lower than could be expected after looking at the data on tax expenditures.

**Table 4: Distribution of Production Subsidies to Livestock Producers in 2004**

Subsidies, Hrv. million	Number of farms in the group	Share of group in total, %	Value of subsidies per group, Hrv. thousand	Share of group in terms of subsidy value, %	Subsidies per farm in different groups, Hrv. thousand	Share of subsidies in total farm revenue, %
No subsidy	1,982	25.8	0	0	0	0
0-5	1,059	13.8	2,487.6	0.3	2.3	0.2
5-25	1,698	22.1	22,736.1	2.6	13.4	1.0
25-50	858	11.2	30,563.2	3.4	35.6	1.9
50-100	810	10.6	58,026.9	6.5	71.6	2.6
100-250	716	9.3	111,496.0	12.6	155.7	3.7
> 250	551	7.2	66,179.8	74.6	1,201.1	10.4
Total	7,674	100	887,101.6	100	94.5	3.8

*Note:* Data are from statistical form No. 50. The farms included in the table have more than 50 workers and cultivate more than 100 ha of agricultural land.

*Source:* Institute for Economic Forecasting, National Academy of Science of Ukraine (unpublished report).

- **VAT expenditures have increased the tax burden on non-farmers.** In 2005, the agricultural VAT expenditures were estimated at 1 percent of total GDP and the rest of the VAT expenditures accounted for 0.8 percent of GDP.<sup>11</sup> These figures show how large the macro effect of the agricultural VAT expenditures is. If these expenditures were abolished to create the fiscal space to finance growth-enhancing investments and social expenditures, it would have a drastic impact on agriculture, especially on livestock producers. But this is a bitter lesson that needs to be learned – fiscally unsustainable support will be removed sooner or later and the longer the government provides such support to farmers, the more counterproductive is this support.

20. **Despite the government's recent efforts to abolish the current VAT expenditures and introduce the reduced VAT rate for agriculture, the Verkhovna Rada has prolonged the current VAT system.** In June 2004, the Law on the Special Taxation Regime for Agriculture, Forestry and Fisheries was approved and was expected to come into force in 2006.<sup>12</sup> This law introduces the reduced VAT rate for agricultural products and continues to keep the accumulated VAT on farm accounts. The key features of both current and future VAT regimes

1. \_\_\_\_\_

<sup>10</sup> The description of problems with the return of VAT to primary small household producers can be found in Demyanchuk and Seperovych (2005).

<sup>11</sup> See World Bank (2005b).

<sup>12</sup> Law of Ukraine No. 1878 dated June 24, 2004.

and the differences between them are summarized in Table 5.<sup>13</sup> In 2005, the President of Ukraine vetoed the prolongation of the current VAT regime, but the Verkhovna Rada overturned the veto, preserving the significant tax expenditures on the agriculture sector and moving the introduction of the special VAT regime to the beginning of 2007. Actually, the Verkhovna Rada has prolonged the VAT exemptions every year since 2000. This demonstrates the political difficulties of eliminating short-term privileges once they have been established.

**Table 5: Key Features of the Current and Future Special VAT Regimes for Agriculture**

Features	Current VAT regime	Future VAT regime
VAT rate for agri. products, %	20	10 during first year and 9 afterwards
VAT rate for milk and meat, %	0	10 (9)
VAT rate charged on purchase of inputs, %	20	20
Restrictions on use of accumulated VAT	Purchase of production inputs only	No restrictions
Mode of calculation	Sales VAT deducted by VAT charge on of inputs	Sales VAT deducted by VAT charge on inputs. If the latter VAT does not offset the former, it is not compensated from the budget
Payment to the budget	Stay on farm accounts	Stay on farm accounts

21. **The new VAT regime would reduce some economic distortions described above and would have several other economic effects.** The new agricultural VAT regime, if introduced, would affect (i) budget revenues, (ii) economic distortions, and (iii) prices:

- **Budget effects:** The changes in the agricultural VAT regime are likely to be budget-neutral compared to the current agricultural VAT regime. This is because the accumulated VAT will remain on farm accounts. However, some budget revenues can be expected if the food processors will have to pay the VAT charged on sales of meat and dairy products to the budget instead of returning it to the primary agricultural producers. As a whole, however, the additional budget earnings are not likely to be high.
- **Economic distortions:** The new agricultural VAT will decrease some economic distortions produced by the current VAT expenditures. It will reduce the tax burden on non-farmers and will also reduce the income inequality within the livestock sector (see Table 3). But the new VAT scheme will not abolish other distortions. Under the new scheme, many crop producers will be taxed, especially those that are unable to offset the 9 percent VAT charged on outputs by 20 percent of VAT charged on purchased inputs. The situation is less clear for livestock producers. Livestock producers will begin to charge 9 percent VAT on sales of agricultural products, but will purchase feed grains at a lower VAT rate. In addition, the new agricultural VAT system will increase the complexity of accounting because of different VAT rates and will thus increase the transaction costs of doing business for both farms and agribusiness companies dealing with farms.
- **Price effects:** It is expected by some experts that the reduced VAT rate will lower agri-food prices and thus increase the demand for these products in Ukraine. This is true for some products but not for others. The aggregate picture is even more complex, because many price interrelations are likely to cancel each other out. Prices for raw milk and meat

1. \_\_\_\_\_

<sup>13</sup> The new special VAT regime for agriculture and other issues related to agricultural taxation in Ukraine are described in detail in Demyanchuk and Seperovych (2005).

are likely to increase, because the VAT rate for these products will increase from zero to 9 percent. On the other hand, the need to adjust the import VAT rate down to 9 percent from the current 20 percent to comply with the WTO non-discrimination clause will reduce the domestic prices of these products, especially meat.<sup>14</sup> Actually, the prices for all agricultural products that Ukraine imports are expected to decline as a result of the import VAT's downward adjustment. In contrast, only a small price effect is expected for agricultural products, which Ukraine exports. This is because the farm-gate prices for those products are determined by border prices and marketing costs but not by the VAT rate. Finally, a lower VAT rate for agricultural products can potentially result in lower food prices at the consumer level, but international experience rarely shows a full transmission of lower farm-gate prices to consumer prices. As a result, the special VAT regime for agriculture will have different effects on the prices of different products, but as a whole it will not increase the aggregate demand for agricultural products through their lower prices.

### 3.2 Budget expenditures

22. **Production subsidies continue to dominate budget spending, which undermines the ability of most farms to sustain their long-term competitiveness without subsidies.** During 2000-05, the output subsidies financed from the budget grew nine fold (i.e., from 100 million Hrv. in 2000 to 900 million Hrv. in 2005) (Figure 5 and Annex). These output subsidies supported both crop and livestock production. Input subsidies, which increased fourfold, were used to lower the costs of selected inputs (e.g., fertilizers, machinery and credit) and farm labor through the financing of Pension Fund compensations as a result of the Fixed Agricultural Tax (FAT) (see Box 3). Until 2005, the farm contributions to the Pension Fund were part of the FAT, but 68 percent of the FAT was paid to the Pension Fund.<sup>15</sup> The FAT contributions, however, did not fully compensate the losses of the Pension Fund, and in 2005 these contributions were excluded from the FAT.<sup>16</sup> Agricultural producers began to pay 20 percent of regular payments; in 2006, agricultural producers will keep paying 20 percent of the regular rate, but in 2007 this rate will increase to 40 percent, and in 2010 agricultural producers will pay in full the regular contributions to the Pension Fund similar to the non-farm employees. From year to year the budget allocation to individual programs has varied significantly, but the list of public programs is almost unchanged. The subsidies were primarily targeted to large farms and suffered from lack of transparency in the eligibility criteria and selection processes. The efficiency of budget allocations continued to be judged on the basis of changes in nominal output or input use, while attention to changes in agricultural productivity and farm incomes as a result of specific government programs remained very low. Therefore, the increased budget for some programs and the reduced budget for others were based on the objective of increasing nominal outputs in reaction to political pressures rather than on the efficiency of programs measured by productivity growth and improved competitiveness.

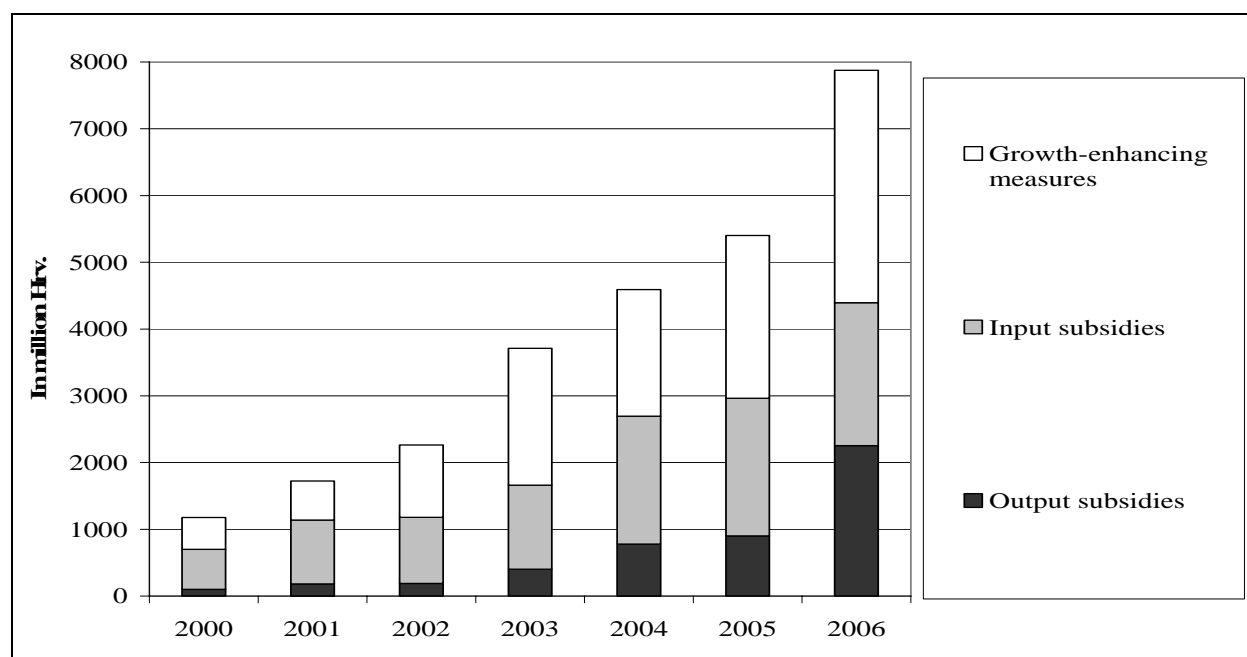
1. \_\_\_\_\_

<sup>14</sup> The WTO non-discrimination clause states that the country is not allowed to discriminate against imports by applying higher rates of taxation than these applied to domestic products.

<sup>15</sup> Of the remaining FAT, 2 percent was paid to the Social Fund and 30 percent to the local budgets.

<sup>16</sup> Annex provides rough extrapolated estimates of payments to the Pension Fund from the budget to compensate the non-payments of agricultural workers during 2000-04.

**Figure 5: Structure of Budget Expenditures on Agriculture, 2000-06 (million Hrv.)**



Source: Laws of Ukraine “On State Budget” (different years).

23. **Subsidization of the interest rate has helped to attract more credit resources to agriculture at low budget costs, but in the medium term this subsidy should be phased out and the problems of the rural finance market should be addressed in a more sustainable manner.** The partial compensation of the interest rate for commercial bank credits replaced very distortive state credits, and the state supply of inputs prevailed until 2000.<sup>17</sup> Under the current circumstances, where the agricultural sector is undercapitalized and the lack of collateral for short-term credits (e.g., warehouse receipts) and long-term credits (e.g., land and other assets) drastically increases the risks of commercial lending, the subsidization of the interest rate through the commercial banking system is probably the most economically and fiscally efficient approach to recapitalizing agriculture and encouraging commercial banks to lend to the sector. Until 2000, the agricultural sector attracted a negligible amount of commercial credits, but in 2005 agriculture and food processors received 7.4 billion Hrv. of commercial credits, including 6.1 billion Hrv. through partial interest rate compensation. Despite the positive impacts of this program, its budget has been rather small (about 150 million Hrv. per year), except in 2005, which reduced its potential positive impact on the sector (see Annex). Such a low budget for the partial compensation of the interest rate cannot be justified when the highly distortive subsidies for crop and livestock producers increased nine fold from 2000 to 2005. In the longer run, the interest rate subsidies are not sustainable and will need to be replaced by measures to reduce the risks of credit to agriculture, to improve its collateral base, and to increase the capacity of farmers (through training and consultancy) to borrow more from commercial banks. However, in the current situation the interest rate subsidies are much better tailored to address the needs of the agricultural sector than crop and livestock subsidization.

1. \_\_\_\_\_

<sup>17</sup> See Chapko (2004).

### **Box 3: The Fixed Agricultural Tax (FAT)**

The FAT was introduced in 1999. It substituted for 12 other direct taxes and levies (profit tax, personal income tax, land tax, local taxes, Pension and Social Fund fees, etc.) from which agriculture is exempted, resulting in significant tax savings for agricultural producers. The FAT is a prototype of a land tax because it is assessed on the value of agricultural land as of July 1997. Livestock producers benefit more from it than crop producers because the FAT is a land tax, but as a whole it is much less distortive than the VAT exemptions, because it does not stimulate higher production of specific products within crop and livestock sectors. According to official statistics, the annual benefits to agricultural producers from this tax are estimated to equal around 1.4 billion Hrv. In reality, however, it is difficult to quantify the precise amount of forgone budget revenues because of the FAT. The benefits from the FAT were probably higher because the current estimate did not account for increased wages, and thus higher personal income taxes and contributions to the Pension and Social Funds over time. Up to 2005, the FAT substituted for 12 taxes, but in 2005 the contribution to the pension fund was excluded from the FAT and the tax rates of the FAT were reduced. However, in 2005 and 2006 the charged rate equals only 20 percent of the regular rate.<sup>18</sup> As a result, in 2005 the benefits from the FAT fell to roughly 230 million Hrv. In 2007 the charged rate for payments to the Pension Fund will increase to 40 percent and in 2010 the agricultural producers will pay the full regular contributions to the pension fund similar to the non-farm employees. The FAT will remain operational till the end of 2009, and although its existence along with a gradual increase in the contribution rate to the Pension Fund will continue to bring financial benefits to the agricultural producers, by 2010 these benefits will decrease to a few hundred million of Hrv.

24. **Programs intended to facilitate the access of farmers to agricultural machinery failed to accelerate the technical modernization of the agricultural sector, and thus should be phased out.** The government has allocated substantial budget resources to the programs aimed at increasing the supply of domestic machinery on the one hand, and at reducing the costs of this machinery to farmers through financial leasing (UkrAgroLeasing state company) and the partial compensation for machinery costs from the budget, on the other. The total costs of these programs equaled 1.5 billion Hrv. or 19 percent of total input subsidies during 2000-05.<sup>19</sup> The principal beneficiaries of these schemes, however, have been the manufacturers of the machinery and UkrAgroLeasing, rather than the agricultural producers who were the intended beneficiaries of the policy. Despite the increased supply of domestically manufactured agricultural machinery and equipment, the farmers continued to purchase foreign machinery because of its better price/quality characteristics. Financial leasing through UkrAgroLeasing has not functioned well, because on the one hand, UkrAgroLeasing priced out the machinery which was manufactured on the basis of the decisions of an inter-ministerial expert group rather than on the demand of final users, and on the other hand, it failed to collect the debts for leased machinery along with the overdue debts for foreign machinery purchased under government sovereign guarantees at the end of the 1990s. In 2000, the overdue debts for foreign machinery amounted to US\$ 200 million and by the middle of 2004 they rose to US\$ 835 million.<sup>20</sup> While increased budget resources were allocated to this central-planning type of distribution system, the program for the partial compensation of the machinery's costs (which was more efficient economically and fiscally for stimulating the increased purchase of agricultural machinery) remained underfinanced. According to Yaroslavskyy (2004), by using 34 million Hrv. of the funds for partial compensation, the agricultural producers purchased more machinery than by using 183 million Hrv. of the financial leasing. Therefore, the government should phase out the financing

1. \_\_\_\_\_

<sup>18</sup> See Law of Ukraine No. 974, dated June 19, 2003, and Law of Ukraine No. 1878, dated June 24, 2004.

<sup>19</sup> See also report of the Accounting Chamber of Ukraine (2003).

<sup>20</sup> See Yaroslavskyy (2004).

of the private activities, such as manufacturing of agricultural machinery and financial leasing, and allow more competition for this agricultural machinery leasing and distribution businesses.<sup>21</sup>

25. **In 2006, the budget expenditures allocated to subsidies will almost double, which will result in increased economic and fiscal losses.** The share of subsidies in the total budget expenditures will rise to 61 percent, largely as a result of increased per kg payments for slaughtered livestock and the introduction of per hectare payments to grain producers.<sup>22</sup> At the same time, less distortive and more fiscally sustainable programs for the subsidization of interest rates and costs of agricultural machinery are to be cut.<sup>23</sup> The 2006 agricultural budget continues a worrying trend towards production subsidies, which at best partially compensate farmers for an inadequate policy environment and the need to support the rural infrastructure, but do little to promote competitiveness-enhancing investments at the farm and marketing level, to address the structural constraints facing the agri-food complex and to enhance rural development.

26. **There is scope to shift scarce public resources away from subsidies to investments in order to ease the structural problems of agriculture and enhance rural development.** Budget subsidies should be gradually phased out, and the fiscal savings reinvested in the provision of investment support and public goods and the enhancement of rural development. This would address the source of the constraints facing the agri-food complex, rather than adding to their symptoms.

27. **The Ministry of Agricultural Policy should develop investment programs for agriculture and should coordinate rural development more actively.** The fiscal savings generated from the phasing out of production subsidies and VAT expenditure schemes could be used for investment grants to agricultural producers, both small and large, to facilitate and accelerate structural changes, improve farm efficiency and help overcome the farm-level cash flow constraints that impede private investments. Today, support for agricultural investment has large needs in order to renew the depleted machinery park, renew and improve the quality of the cattle herd, purchase cooling and processing equipment, and comply with food safety requirements. Investment programs should operate as the competitive grants that co-finance the farm investments financed from both own and borrowed capital. Budget expenditures should stimulate investments to increase competitiveness, but should not stimulate inefficient production and slowdown innovations. More public resources could also be allocated to rural development programs. Since rural development stands outside of the exclusive responsibility of the Ministry of Agricultural Policy, this would require a closely coordinated strategy for rural development between the Ministry of Agricultural Policy and other ministries. Rural development is extremely important to agricultural growth, to free agricultural enterprises from the provision of social services and foster the creation of non-farm jobs, and also to provide the needed rural infrastructure that fosters agricultural growth and competitiveness.

28. **International experience demonstrates that production subsidies generate strong domestic vested interests which make their reform politically difficult.** Thus, agricultural policy should be forward looking and should not force Ukraine to repeat the costly mistakes that have created domestic and international friction elsewhere. Looking ahead Ukraine should be cognizant of the experience of richer countries and of their political difficulties in shifting their

1. \_\_\_\_\_

<sup>21</sup> See IFC (2005) on financial leasing in Ukraine.

<sup>22</sup> The producers of winter and spring grains will receive from 65 to 100 Hrv. per ha. In total, the subsidies will be provided for 5.4 million ha of winter grain areas and 7.1 million ha of spring grain areas.

<sup>23</sup> Although these programs could become the base for farm investment programs described in paragraph 27. Partial compensation of interest rate, however, needs to be granted for longer term investments and partial compensation of machinery needs to be expanded to other types of equipment, for example for dairy and meat production and processing.

support to agriculture from highly distortive production subsidies to decoupled forms of income support and support to rural development and the multi-functionality of agriculture. The uneven distribution of subsidies among farmers under the EU Common Agricultural Policy (CAP), for example, was among the main driving forces in moving away from coupled subsidies to decoupled income payments in the 2003 CAP reform.<sup>24</sup> In the EU, as much as 80 percent of its subsidies go to the richest 20 percent of farmers, and the largest single recipients of CAP payments tend to be large agribusinesses and large landowners. In France, for example, the largest recipient of the CAP subsidies, 12 percent of the farmers absorb more than 40 percent of total CAP payments. International experience thus points up the lessons that leaving the mode of farm support unchanged will make the needed changes in agricultural support policies increasingly challenging. Ukraine should take advantage of the fact that its agricultural policies and strategy for intervention and support are still being designed so that policy changes can be more easily implemented in response to international commitments such as the WTO or to the needs of the agricultural sector.

29. **The Government of Ukraine should consider WTO membership not as a threat to agriculture but rather as a unique opportunity to change its farm support policy for the better.** An agreement on membership in the WTO is within reach. Ukraine should take advantage of this window of opportunity to justify the politically difficult shift of domestic farm support from the highly distortive ‘amber box’ to the least distortive ‘green box’ measures.<sup>25</sup> This should be the choice not only because the investments that are most growth-enhancing are ‘green box’ measures (and thus not the subject to reduction commitment within the Aggregate Measurement of Support), but mainly because such public investments bring in high economic and social returns and unlike subsidies, are the major deterministic factors of the long-term competitiveness of the agricultural sector. During the shift to the ‘green box’ measures, more attention should be paid to the quality of public investments, which to date has been very low (see next section).

### 3.3 Improving the Quality of Growth-Enhancing Investments<sup>26</sup>

30. **The final reason for the small impact of public spending on agriculture is the poor quality of growth-enhancing investments.** From 2000 to 2005, the budget investments, in measures which potentially would encourage growth, grew fivefold, and their average share in total budget expenditures equaled 44 percent (Figure 5 and Annex). The greatest portion of these investments was allocated to agricultural education and training, research and development, crop selection and livestock breeding, and the public food safety and quality system. International experience shows high returns on agricultural growth and competitiveness for such public investments, ranging from 40 to 60 percent. The comprehensive study by Roseboom (2003) shows that the effective rates of return on research and development investments are significant irrespective of the level of region’s development (Table 6). The impact of public investment in Ukraine, however, has not been as high as elsewhere. While some of its limited impact reflects an overall policy environment that does not encourage growth and competitiveness, it also

1. \_\_\_\_\_

<sup>24</sup> This is too early to introduce decoupled income support in Ukraine similar to those in the EU. This support is more transfer efficient than coupled support and market price support but it hampers the structural change – the only hope of a long-term development of agriculture. There are many inefficient farms in Ukraine and the introduction of decoupled payments would slow down the necessary restructuring which is the case in some of the EU New Member States with a large number of small and inefficient farms.

<sup>25</sup> See von Cramon-Taubadel and Zorya (2005) on the implications of Ukraine’s membership in the WTO for agricultural policy.

<sup>26</sup> This section is largely based on the preparatory work of the World Bank “Agricultural Competitiveness and Food Safety Project” (see Box 1).

reflects weaknesses in the way these potentially very important support programs are being financed, managed and implemented.

**Table 6: Estimated Rate of Return of Research and Development Investments**

	Number of estimates	Mean	Standard deviation
Industrial countries	78	66	120
Developing countries	123	59	38
Africa	25	46	27
Asia and Pacific	38	77	52
LAC	56	52	27

Source: Roseboom (2003).

31. **The efficiency of the delivery of public services should be improved.** Agriculture and rural areas are in urgent need of the support of many public services (i.e., an educated labor force, access to training opportunities, market information, extension services, food safety and quality assurance services, access to risk-mitigating instruments, environmental protection and rural investments). But their quality should be improved, in part through the restructuring of the public institutions. Clearly defined performance standards for the provision of public services should be developed and agreed as a part of the annual budget review process and should form the justification for the budgets provided. Where appropriate, in the case of those agencies that provide public services or implement policies on behalf of the government, legislation should be developed to enhance reporting requirements, conduct independent audits and ensure public disclosure of the financial information and services provided. These agencies should also be disengaged from commercial activities, particular those that compromise their ability to carry out regulatory functions.

32. **To further improve the quality of growth-enhancing investments, the government would need to enhance the partnership with the private sector and provide adequate legislative support to facilitate the private-based delivery of many services.** Public services, such as fundamental agricultural research, education, public food safety, etc., have a public nature and thus merit public finance. The public sector would need to continue to finance those services that generate important benefits for the society as a whole but which clients are unlikely or unable to finance on their own. At the same time, public sector programs should avoid competing with private services and should provide technical support to private providers, develop public-private partnerships for service delivery, share information, coordinate activities with private service providers, and establish mechanisms for the accreditation of private advisory services. In addition, the government would need to improve the legislation and enabling policy framework in order to allow and facilitate the delivery of many important services from private companies. In many cases, active and clear government support and facilitation are needed rather than public finance (see Box 4).

#### **Box 4: Development of Risk-Mitigating Instruments for Agriculture in Ukraine**

It is well-known world-wide that agricultural producers are exposed to natural disasters and extreme seasonal price fluctuations. This is especially true of Ukraine. Ukrainian farmers have increasingly faced serious risks from natural disasters (mainly drought and frost) and volatile prices. This makes their income unpredictable and limits their access to finance.

The government has an important role to play in mitigating these risks by facilitating the establishment of a future exchange and agricultural insurance system, but several years of effort have not brought about much progress in this direction. Instead, the government has established the state-owned Agrarian Exchange and has regularly allocated the budget resources to compensate the insurance fees paid by grain and sugar beet growers to the private insurance companies.<sup>27</sup> Both instruments, however, have not reduced the risks faced by agriculture.

If real progress is to be made in mitigating risks, the government needs to voice its unequivocal support for the creation of such risk-mitigating instruments as a futures market and agricultural insurance, while at the same time leaving their establishment to a broad-based expert group whose sole purpose is to create a viable agricultural futures market and agricultural insurance system. The latter system can be based on the innovative “weather-index based insurance” which has been successfully applied in several countries with the support of the World Bank.<sup>28</sup> It is only by the provision of the public goods in a close partnership with the private sector that public investments in agriculture and rural development will bring high returns, and Ukrainian farmers will have access to private and public goods of sufficient quantity and quality.

33. **Special attention should be paid to improving the agricultural knowledge system.** A well-functioning agricultural knowledge system, consisting of agricultural research, education, training, and technology transfer, is one of the most important preconditions for creating a competitive and efficient agricultural sector. In Ukraine, however, the agricultural knowledge system has failed to adjust to the new realities. The agricultural research and education systems have excess capacity in terms of physical infrastructure, land and research staff relative to the operational budgets for these institutions. As a result, the quantity and quality of the research and training is low relative to the public expenditure outlays. The government would need to concentrate agricultural research activities in selected major regional centers with the appropriate physical equipment and human resources to link researchers with the major stakeholders, educators, producers, processors, marketers, and consumers. Extension services should be incorporated into the agricultural knowledge system and sufficient public finance should be secured. In addition, the efficiency of the agricultural knowledge system would need to be enhanced by minimizing the level of core budget transfers to educational and research institutions and increasing the extent of competitive grant programs based on clear performance indicators/standards. Successful competitive grant programs for agricultural research and extension services have been established in many Eastern European countries and some have been implemented with World Bank financing.

34. **Using the momentum of the anticipated WTO membership and of closer integration with the EU, public food safety and quality agencies should be strengthened in order to better protect the public health and facilitate the agri-food trade.** The efficiency and effectiveness of Ukraine’s national food control system should be improved to protect domestic consumers from food-borne illnesses and from such evolving global threats as avian flu, and to

1. \_\_\_\_\_

<sup>27</sup> See ARD (2005) on the agricultural insurance market and the UNCTAD (2005) on the futures market in Ukraine.

<sup>28</sup> Currently, the International Finance Corporation (IFS) undertakes the pilot on weather-based agricultural insurance in Kherson Oblast. The government can build on this work and attract other donors to assist in developing a coherent policy framework for an innovative private-based agricultural insurance system in Ukraine.

ensure that imported foods conform to national requirements. Another important task is to assure the safety and quality of Ukraine's agri-food products to enable primary producers and food processors to enter high-value international markets and compete domestically with imported products. Today, increasingly stringent food safety and agricultural health standards in other countries pose major challenges for Ukraine's entry into the international markets for high-value products such as dairy products, meat, and fruits and vegetables. In general, for countries and suppliers that are well prepared, rising standards represent an opportunity; for countries and suppliers that are poorly prepared, they pose safety and market access risks.<sup>29</sup> To respond to these challenges, the government increased the budget financing of veterinary and quarantine inspections and the grain quality agency from 6 percent of total budget expenditures in 2000 to near 12 percent in 2005. In addition, work is under way to complete the international accreditation of the veterinary and sanitary laboratories and to adjust Ukrainian legislation on sanitary and phytosanitary measures (SPS) and food safety to the WTO and EU requirements. While the approximation of the SPS legislation and the re-equipment of public laboratories are important activities, this does not address the main weaknesses of the food safety system in Ukraine. A coherent strategy would be needed to ensure public-private partnership in order to: (i) improve coordination among the Ministries of Agricultural Policy, Health Care and Economy to avoid the duplication of functions by these agencies; (ii) lower the costs of and time for the issuance of SPS certificates and increase trust in Ukrainian quality and safety certificates domestically and abroad; (iii) clearly define the roles of the public and private sectors in ensuring food safety and shift more responsibilities away from the public to the private sector; (iv) replace the old GOST standards by market-based standards to avoid the corruption stimulated by loopholes in the Soviet GOST standards and to better enforce food safety legislation; (v) support the development of an effective and integrated system linking the sources of information and advice to the needs of the various actors along the food supply chain from primary producers to processors and traders; and (vi) support food science and research programs through a competitive research grant program for multi-disciplinary research in food safety and quality issues and a competitive post-graduate grant scheme for food science, food technology and food economics. These activities could be supported by the World Bank and other donors (see Box 1).

1. \_\_\_\_\_

<sup>29</sup> See World Bank (2005c).

## 4 References

- Accounting Chamber of Ukraine (2003): On Results of Inspection of Use of Budget Expenditures to Compensate the Part of Machinery Costs and Support the Manufacturing, and the Results of Debt Collection for Domestic and Foreign Machinery. Kyiv, Ukraine.
- ARD (2005): Crop Disaster Assistance in Ukraine: Issues, Alternatives and Consequences. Agriculture and Rural Development, the World Bank, August 26, 2005.
- Chapko, I. (2004): Evolution of Credit Mechanisms to Agricultural Enterprises during 1991-2003. Agricultural Policy for Human Development Project, Working Paper No. 2, Kyiv.
- Demyanchuk, V. and N. Seperovych (2005): Mechanisms of Taxation of Agriculture in Ukraine. Agricultural Policy for Human Development Project, Working Paper No. 2, Kyiv.
- von Cramon-Taubadel, S. and S. Zorya (2005): "The Implications of the WTO-Accession for Agricultural Policy in Ukraine" in: von Cramon-Taubadel, S., S. Demyanenko and A. Kuhn (eds.): *Ukrainian Agriculture: Crisis and Recovery*. Shaker Verlag, Aachen, p. 6-15.
- von Cramon-Taubadel, S. (2004): "The 2003 Harvest: Crisis! What Crisis?" in: von Cramon-Taubadel, S., S. Demyanenko and A. Kuhn (eds.): *Ukrainian Agriculture: Crisis and Recovery*. Shaker Verlag, Aachen, p. 183-189.
- von Cramon-Taubadel, S. (2001): "Price Determination and Government Policy on Ukrainian Grain Market" in: von Cramon-Taubadel, S., S. Zorya and L. Striewe (eds.): *Policies and Agricultural Development in Ukraine*. Shaker Verlag, Aachen, p. 103-112.
- EBRD and FAO (2005): Ukraine: Review of the Sunflower Oil Sector: 2004 Update and Mid-Term Strategy. FAO Investment Centre and EBRD Cooperation Program. Report Series No. 10, August.
- IER (2002): The Competitiveness of Milk Production in Ukraine. Institute for Economic Research and Policy Consulting in Ukraine, Advisory Paper S12.
- IFC (2005): Leasing in Ukraine. Prepared by E. Mehrengs. International Finance Corporation (IFC), Washington, D.C.
- Lopez, R. (2005): Why Governments Should Stop Non-Social Subsidies: Measuring the Consequences for Rural Latin America. University of Maryland at College Park, Revised version: February 4, 2005.
- Nedoborovskyy, A. (2004): Pfadabhängigkeiten und Effizienz der Betriebsstrukturen in der ukrainischen Landwirtschaft– Eine theoretische und empirische Analyse. Ph.D. Thesis of the Institute of Agricultural Development in Central and Eastern Europe (IAMO), Halle/Saale, Germany.
- Nivjevskiy, O. (2006): Study on Public Expenditures on Agriculture in Ukraine. Institute for Economic Research and Policy Consulting in Ukraine. Report prepared for the on-going World Bank "Public Expenditure Review in Ukraine 2005-06".
- OECD (2004): Agricultural Policies in OECD Countries: At a Glance. Organization for Economic Cooperation and Development, Paris.
- Roseboom, J. (2003): Optimizing Investment in Agricultural Research, or the Quest for Prosperity. ISNAR Research Report 23. ISNAR, The Hague
- Tangermann, S. (2006): OECD Work on Agricultural Policies in Brazil, China, India and South Africa. Presentation at the Rural Week of the World Bank, Washington, D.C. on February 27, 2006.
- UNCTAD (2005): "Assessment of the Possibilities for an Agricultural Futures Market in Ukraine". Report prepared by L. Rutten, A. Belozertsev and F. Youssef for the World Bank

*Agricultural Competitiveness and Food Safety Project* in Ukraine. December 15, 2005.

Yaroslavskyy, O. (2004): Current Situation with Provision of Agricultural Machinery to Agricultural Enterprises and Efficiency of Policy to Develop the Market of Agricultural Machinery. Agricultural Policy for Human Development Project, Working Paper No. 9.

World Bank and OECD (2004): Achieving Ukraine's Agricultural Potential: Stimulating Agricultural Growth and Improving Rural Life. OECD and the ESCCD, Europe and Central Asia Region, the World Bank.

World Bank (2005a): Turkey: Policy and Investment Priorities for Agriculture and Rural Development. ECSSD/ECA, Washington, D.C.

World Bank (2005b): Strengthening the VAT in Ukraine. Paper prepared for the Public Expenditure Review of Ukraine 2005-2006.

World Bank (2005c): The Impact of Food Safety and Agricultural Health Standards on Developing Country Exports. Summary of the World Bank Report No. 31207. PREM and ARD, Washington, D.C.

Zorya, S. (2005a): "Reforming Agricultural Support" in: Meyers, W., S. Demyanenko, T. Johnson and S. Zorya (eds.): *Refocusing Agricultural and Rural Development in Ukraine: Action Plan for the Road Ahead*. International Business Initiatives (IBI) and the U.S. Agency for International Development, Washington, D.C.

Zorya, S. (2005b): International Comparison of Farm Support in Ukraine. *Economy of Ukraine*, #10, Kyiv.

## Annex: Budget Expenditures to Agriculture, 2000-06 (million Hrv.)\*

	2000	2001	2002	2003	2004	2005	2006
<b>SUBSIDIES</b>	<b>698</b>	<b>1,138</b>	<b>1,179</b>	<b>1,661</b>	<b>2,695</b>	<b>2,952</b>	<b>4,397</b>
<b>Production Subsidies</b>	<b>100</b>	<b>181</b>	<b>190</b>	<b>401</b>	<b>779</b>	<b>892</b>	<b>2,252</b>
Financial support to crop and livestock production	17	61	74	236	421	690	1,993
Inc. Slaughter subsidies per cattle with minimum weight threshold	na	36	na	174	338	554	745
Support to horticulture, wine grapes and hops	80	111	111	151	109	175	228
Financing of spring field works	na	na	na	na	247,9	na	na
Financial support to private farms	3	9	5	13	1	27	28
<b>Input Subsidies</b>	<b>599</b>	<b>957</b>	<b>989</b>	<b>1,260</b>	<b>1,916</b>	<b>2,061</b>	<b>2,145</b>
Partial compensation of costs of fertilizer subsidies	na	na	na	40	110	na	na
Partial compensation of interest rates for credits	50	128	120	75	142	350	260
Partial compensation of costs of agricultural machinery	na	na	16	18	36	270	20
Financing leasing through the UkrAgroLeasing	66	178	59	183	363	233	183
Subsidies to manufacturers of agricultural machinery	10.0	7.1	15.2	10.7	8.7	0.7	na
Compensation of payments to the Pension Fund**	473	644	780	933	1,257	1,207	1,670
<b>GROWTH-ENHANCING INVESTMENTS</b>	<b>478</b>	<b>585</b>	<b>1,085</b>	<b>2,051</b>	<b>1,895</b>	<b>2,439</b>	<b>3,482</b>
Rural development	28	6	9	42	24	23	22
Research and development	79	98	162	67	78	143	158
Education and training	232	280	383	491	620	914	1,038
Pets and disease control	2	1	1	2	5	5	5
Food safety and quality control	40	39	298	370	471	585	704
Crop selection and livestock breeding	39	71	26	120	158	234	222
Land management	23	26	1	6	10	15	5
Insurance costs compensation	na	na	0	0	0	54	10
Administration costs of the Ministry	5	7	8	51	59	80	101
Natural disaster relief	2	1	2	695	67	20	25
Environment protection	2	2	29	45	61	82	115
Public stockholding	na	5	19	14	50	26	685
Other measures	26	49	143	138	277	236	355
<b>TOTAL BUDGET EXPENDITURES</b>	<b>1,176</b>	<b>1,723</b>	<b>2,263</b>	<b>3,712</b>	<b>4,590</b>	<b>5,392</b>	<b>7,879</b>
Agricultural expenditures as share of total budget expenditures, %	2.4	3.1	3.7	4.9	4.5	4.7	na
Agricultural budget expenditures as share of GDP, %	0.7	0.8	1.0	1.4	1.3	1.4	na

Note: \* Public expenditures in this table are managed by the Ministry of Agricultural Policy of Ukraine, except for the subsidies to manufacturers of agricultural machinery and equipment. The public expenditures for 2000-04 are executed expenditures, while the expenditures for 2005-06 are envisaged in the budget laws.

\*\* There are no data on exact contributions to the Pension Fund from 2000 to 2004. Until 2005, the losses of the Pension Fund were compensated from total budget revenues, but there were no separate articles in the budget showing the precise losses due to non-payments of agricultural producers. Approximate budget expenditures to the Pension Fund during 2000-04 are extrapolated back based on the budget expenditures in 2005 and the growth rate of agricultural wages during 2000-05.

Source: State Treasury of Ukraine and Laws of Ukraine "On State Budget" (2005-06).