

Eurozone crisis and the agrifood sector: the Portuguese case

Pedro Reis

Researcher, Former Chair of the scientific council.
National Institute for Agricultural and Veterinary Research (INIAV), Portugal

Joaquim Cabral Rolo

Coordinator researcher, Former Vice-President
INIAV, Portugal

Introduction

Portugal was one of the most affected European countries by the sovereign debt crisis, because of which implemented a strong adjustment program, between 2011 and 2014. The sovereign debt crisis that affected the peripheral countries of the Eurozone, emerged in 2010, triggered by the financial global crisis of 2008, and was associated to a combination of international and national factors and the construction model of the Euro. In 2009, Portugal was strongly affected by the global economic depression. The Gross Domestic Product (GDP) decreased 3.0% and the unemployment rate increased 1.8 pp¹. Fiscal policies to stimulate the economy, both at national and international levels, were implemented. The Portuguese integration on the Euro withdraws the possibility of monetary or exchange rate policies. In that year, the Government deficit reached the 8.0% (it was 2.9% in the previous year).

The economy recovered in 2010, the GDR grew 1.9% but the unemployment rate didn't reverse the growing trend. In the beginnings of 2010, the lending conditions for governments became worse, with higher debt levels, and high current account deficits. The interest rates had started to reach unsustainable levels, leading some countries to request financial assistance to the European Union and the International Monetary Fund (IMF). The Portuguese economy was strongly affected by Eurozone crisis and by the following austerity measures. There was a dramatic setting with a GDP drop of 10 thousand millions € (a -1% average annual growth rate), a decrease in the investment of 35%, more than 350 thousand people unemployed, hundreds of thousands of emigrants, and the public debt, in GDP percentage, more than duplicated (from circa 60% to more than 130%) (Mamede, 2015). It has nevertheless been emphasized that the adjustment program had the merit of reducing the external deficit. The external balance of trade became positive in 2013 but this switch-over was mainly due to the changes on imports (idem).

In this context of economic and social crisis, the agriculture and agribusiness can be a powerful tool of rural development, as it happened in Greece: the agricultural production started increasing again, as did the employment in agriculture followed by a significant increase in the agro-food exports (Mattas et al. 2013). Some changes occurred in the sector. Farmers were attracted by new and dynamic crops, highly demanded by international markets. Moreover, a significant number of those that turned to agriculture are educated young farmers and first starters (idem). These changes reinforce the innovation importance as well as the role of the young farmers' installation, to promote the agrifood sector and its contribution to the crisis end (or exit, or solution).

The aim of this article is to analyse how the agrifood sector reacted to the financial-economic crises, and its contribution to reduce the unemployment and the external trade balance deficit.

¹ The sources of macroeconomic data are the Statistics Portugal (*Instituto Nacional de Estatísticas*) (www.ine.pt) and Banco de Portugal (BP) statistics (www.bportugal.pt).

Effects on labour market – a turn back to the rural or a refuge?

In a context of high unemployment rate, the agriculture is seen as an alternative. In the first decade of this century, Portugal still had a high share of employment in the primary sector, with values above. With the economic crisis, the unemployment rate of the whole economy rose from 7.6% in 2008 to 16.2% in 2013, always with an upward trend. This evolution of unemployment, especially in construction² and other industrial sectors, led the Portuguese workers to become more interested in agriculture (as farmers or as employees). During the economic adjustment period (2011-2014), there was a growing perception that employment in agriculture and agribusiness was increasing.

In 2013, a daily newspaper highlighted the largest increase in employment in the North and Centre zones of the country as well as the self-employed in agriculture, concluding that "the return to the land for their livelihoods may be the choice of many families" (Cable et al., 2013). This awareness was reinforced by the large number of projects carried out by young farmers. The number of people under 40 who expressed interest in settling as farmers (9,784 applications for individual producers and 1,987 applications for companies), between 2008 and 2014, was higher than the number of individual farmers under 35 years, registered in the agricultural census of 2009 (6.845 producers).

But what really occurred, during the crisis, with the agrifood employment rates? Along the crisis period, that started in 2008, the jobs were heavily destroyed, a trend which was only inverted in 2014, after de financial assistance programme. Between 2008 and 2013, the number of jobs decreased 13%, followed by a low increase in 2014. In this period, for the secondary sector this variation was -29% and only 4% for tertiary sector. On primary sector, the decrease was 22%, almost twice the number for all the economy.

Table 1
Growth rates of GDP and employment by economic sector in Portugal

	Growth of GDP (%)	Employment variation rates (%)			
		Total	Primary	Industry	Services
2008	0,2	-	-	-	-
2009	-2,98	-2,9	-2,8	-6,9	-1,0
2010	1,9	-1,4	-3,6	-3,5	-0,1
2011	-1,83	-3,2	-11,7	-4,1	-1,3
2012	-4,03	-4,1	1,5	-10,2	-2,4
2013	-1,13	-2,6	-7,8	-8,2	0,5
2014	0,91	1,6	-14,1	2,3	3,8

Elaborated by the authors. Data source: Statistics Portugal and BP statistics

The primary sector – agriculture, forestry and fishing – lost more jobs than industry or services, the exception being the year 2012. This was the worst year of the depression period, with a great decrease of GDP (-4,03%). Between 2011 and 2012, the industrial sector lost more than 10% of the jobs, mainly in construction (-18,9%). Some of those people moved to agriculture activity, as farmers or employees.

² The employment on construction activity decreased 43.5%, from 2008 to 2013.

Table 2
Employment on agri-food sector in Portugal

Year	Number of employees (in thousands)				Primary sector	Agriculture	
	Total	Primary sector	Manufacture of food products	Manufacture of beverages	Annual growth rate (%)	annual work unit (10 ³ AWU)	AWU growth rate (%)
2008	5 116,6	584,6	98,8	14,6	-	343,3	-
2009	4 968,6	568,4	96,6	14,1	-2,8%	337,9	-1,6%
2010	4 898,4	548,1	95,4	14,5	-3,6%	309,4	-8,4%
2011	4 740,1	483,9	94,1	15,0	-11,7%	299,0	-3,4%
2012	4 546,9	491,4	90,9	14,6	1,5%	296,1	-1,0%
2013	4 429,4	453,1	88,2	14,5	-7,8%	281,3	-5,0%
2014	4 499,5	389,1	89,8	14,5	-14,1%	273,3	-2,9%
2015	4 548,7	342,5	n.a.	n.a.	-12,0%	263,2	-3,7%

Elaborated by the authors. Data source: Statistics Portugal

Agriculture absorbed part of the economic crisis impact but without a meaningful effect on employment. Only in 2012 occurred a reversion on the decreasing trend of the primary sector employment³, but the jobs on this economic sector of activity decreased 11.7% between 2010 e 2011. We can analyze the employment through the annual work unit (AWU) which is more close to the real work/employment on agriculture. The AWU has been decreasing consistently, since 2008 until nowadays. However, the smaller reduction can be seen between 2011 and 2012. This is in line with the jobs' trend in primary sector. The annual average growth rate of jobs in primary sector was -5.0% and -3.9% for the AWU.

The Portuguese Rural Development Programme 2007-2013 (PRODER programme) supported the installation of young farmers. It helped 8.199 young farmers to settle as individual producers or as agricultural company's members, between 2008 and 2014. Between 15% and 20% of them are part-time farmers who devote less than 50% of the time on the farm. Taking into account this information, we estimated an increase in 1.6% to 2.2% of the AWU due to the new young farmers. This figure is very low comparing with the AWA variation rate in the same period (-20.4%). In 2013, 27 young farmers from a random sample, financed by PRODER, were inquired. Almost 30% were unemployed before starting the agriculture activity, circa a half kept working as wage earners after installation, and the main motivation for two thirds of the applicants was the obtainment of a supplementary income (Soares, 2013). In fact the study concludes that the agricultural activity functioned mainly as a complementary income for the young farmers or as a safety activity capable of ensuring an income in case of firing. The study also comprehended the geographical pattern of the new farms and of the residence of these new farmers. The crisis may be having a catalytic effect on rural territories, both at economic and social level without, nevertheless, counteracting the agriculture abandonment and the depopulation of the countryside.

The international trade – an opportunity within the crisis?

In the first decade of the XXI century, the Portuguese economy had a succession of external shocks that strongly undermined the economic competitiveness (Mamede, 2015). Simultaneously, the households and firms were quite indebted, a situation started in the middle of 1990, due to the easy credit conditions. These two factors led to high trade balance deficits, which have further deteriorated with the rise in oil prices. One of the major macroeconomic imbalances at the beginning of the crisis was the external deficit. Between 2000 and 2008, the trade balance, in GDP percentage, ranged between 10.9 and 6.9%. The deficit of the food trade balance is one of the structural weaknesses of the Portuguese economy. Before 2008, it accounted for about 25% of the external deficit (GPP [s.d.]). The annual negative balances of the agrifood sector ranged between 3,500 and EUR 3,900 million between 2000 and 2007, respectively. Despite this increase, exports grew at a rate twice that of imports. The average annual growth rates were, respectively, 9.3 and 4.8% (authors' estimation from the GPP data).

³ The number of fishing jobs represents less than 3% of the primary sector employment, and it didn't change from 2008 to 2015 (less than 0.5%).

Table 3
International trade on the agri-food sector in Portugal (in Euros)

Year	Agrifood complex			Vegetables, fruits and its preparations		
	Imp.	Export.	Balance	Imp.	Export.	Balance
2008	8 218,9	4 197,8	-4 021,1	1 136,5	698,1	-438,4
2012	8 724,5	5 202,3	-3 522,2	1 073,4	920,9	-152,5
2014	8 873,7	5 999,1	-2 874,6	1 198,7	1 102,8	-95,9
2015	9 305,7	6 328,9	-2 976,8	1 261,4	1 223,6	-37,8
Annual average growth rate (%)	1,8%	6,0%	-4,2%	1,5%	8,3%	-29,5%

Elaborated by the authors. Data source: Statistics Portugal

During the crisis, the agri-food trade deficit eased, due mainly to a slowdown in import growth. Exports registered a high rate of average annual growth, despite being lower than the one verified between 2000 and 2007. One should highlight the good performance of the vegetables, fruits and its preparations. The external deficit of these products is close to zero due to the imports substitutions and the good performance of exports.

Also during the crisis, the consumers' behavior pattern changed. In a first phase, from 2008 to 2010, the available gross income of households increased 2.5%, in constant prices, increased the catering and hotels but decreased the cost of food, beverages and tobacco (source data: Statistics Portugal). On the next phase, between 2010 and 2012, it was precisely the opposite: a significant decrease in the available household gross income (7.4%), an increase of expenditure on the purchase of food, beverages and tobacco, and a reduction in expenses with catering and hotels (idem). If we consider together the cost of food - at home or in restaurants (and including expenses for hotels) - we have a lower decrease of 1% between 2008 and 2012. The crisis impacted mainly on the consumption of other goods and services (e.g. with transport, recreation and culture). But there were also changes in the consumption pattern of food products for the whole of the Portuguese population - a declining demand for differentiated foods, with higher added value, along with a strengthening of the distribution labels, and a decrease in expenditure on restaurants (Duarte, 2013).

The coverage rate of imports by exports has been increasing since the crisis' beginning, from 49,6% (in 2008) to 62,0% (in 2013). This outcome reflects a bigger growth of the exportations when compared to that of imports, as cited above. Between 2008 and 2010, the export intensity had declined, as well as the degree of openness, but the agrifood sector reacted well to the economic adjustment measures associated to the financial assistance programme, with a strong presence on international markets, a higher export intensity and a greater level of openness. This means a high growth in a context of increasing competitiveness and internationalization.

Table 4
Indicators of international trade on the agri-food sector

Year	Coverage rate of imports by exports: $[(exp./imp.) * 100]$	Export intensity: $(exp./GVA) * 100$	Degree of openness: $[(exp. + imp.)/GVA * 100]$
2008	49,6	72,7	219,1
2010	53,3	70,2	202,0
2013	62,0	90,8	237,4

Elaborated by the authors. Data source: Statistics Portugal

Innovation was a major key in this response to the crisis. In 2013 was carried out a survey to 32 farmers, which had invested in the last years and were marked as innovators or dynamic (Reis, 2013). Most respondents indicated that the innovations introduced in the past five years, had had a positive impact on the mitigation of the crisis impact, as well as on the profitability of their farms. The main effects of innovation, in response to the crisis, were reported to be a better ability to adapt to changes in the market (59%), canvass of new customers and entering in new markets (56% of respondents). More than two thirds of the respondents said that the crisis did not affect innovation activities (Reis, 2013). However, some respondents mentioned the postponement of investments due to the crisis - credit difficulties and difficulties in recovering sales refunding.

To innovate, financing is critical. But we were under the Financial Assistance Programme. It was very difficult to have credit from the banking system. Despite this context, there were positive signs for agriculture and innovation in agricultural production. There was an awakening of banks to the potential of the agrifood sector, with new specific financing solutions for the sector and an increase in loans, even though it did not yet bring a significant change (Cable et al., 2013).

Conclusions

From the beginning of the XXI century, Portuguese industry has suffered a strong loss of competitiveness. It also accumulated high annual deficits of the trade balance, for which has very much contributed the agrifood sector. The sovereign debt crisis in the euro zone, has led to a severe economic adjustment program, associated with the financial assistance program. The unemployment dramatically increased, and the available household incomes were severely reduced. The level of expenditure on food (including drinks) remained substantially the same but the pattern of consumption changed. During the adjustment period (2011-2013), the national trade balance became positive and the external deficit of the agrifood complex was greatly reduced. This reduction was mainly due to the increase in the exports (higher export intensity and a greater degree of openness) rather than to the decrease in the imports. This dynamic is associated with some value chains, like wine, olive oil, vegetables and fruits, with a larger capacity to innovate and conquer foreign markets and customers. There is also a very positive dynamic in the establishment of young farmers, with new ideas and higher levels of education. Even though agriculture served as a refuge for some unemployed, there wasn't a reversal of the loss of jobs in the primary sector.

The observed dynamics, allows concluding that, more than agriculture contribution to mitigate the crisis' impact, the crisis will have been a driver for innovation, investment, establishment of young farmers and internationalization. Now we must take advantage of these dynamics, taking into account the agricultural innovation system, the monitoring of young farmers and agribusiness entrepreneurs installed in rural areas, without neglecting the territorial cohesion, particularly in rural territories with low density.

Bibliography / More information

- Cabo, P.; Matos, A.; Fernandes, A.; Ribeiro, M., 2013. "A Banca, o financiamento agrícola e a crise". In Carvalho, M.; Damião, P.; Narciso, V. (coord.), *Alimentar Mentalidades, Vencer a Crise Global – Atas do ESADR 2013*, ed. Univ. de Évora / Comissão Organizadora do ESADR 2013, ISBN 978-989-8550-19-4, pp 125-145.
- Duarte, F., 2013. "Consumo alimentar: regresso ao passado?". In Santos, J.L.; Carmo, I.; Graça, P.; Ribeiro, I., *O Futuro da Alimentação: Ambiente, Saúde e Economia*. Lisboa: FCC, ISBN 978-972-31-1486-7, 247 p.
- GPP, [s.d.]. *Comércio Internacional do Complexo Agroflorestal e Pescas*. GPP/Ministry of Agriculture and Sea. (www.gpp.pt/pbl/Period/Comercio_Internacional_GPP.pdf), accessed in 14-03-2016.
- Mamede, 2015. *O que fazer com este país*. Barcarena: Editorial Presença
- Mattas, K.; Loizou, E.; 2013. "Agriculture: a powerful tool of rural development in the current economic crisis", Watch Letter n°24, CIHEAM.
- Reis, P., 2013. *A inovação na produção agrícola*, Animar.
- Soares, P., 2013. *Jovens agricultores: transição rural ou regresso à terra?*, Animar.