

Exports of Fruit and Vegetables from Morocco and other Mediterranean Countries to the EU: Some Policy Recommendations from the Covid Pandemic

Exportations de fruits et légumes du Maroc et d'autres pays méditerranéens vers l'Union européenne : quelques recommandations pour l'action publique face à la pandémie de Covid

Obst- und Gemüse-Exporte aus Marokko und anderen Mittelmeerländern in die EU: Politikempfehlungen aufgrund der Covid-Pandemie

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Introduction

The Covid-19 pandemic triggered a global economic crisis and was responsible for significant pressures on agricultural markets, including the fruit and vegetable (F&V) sector. During the pandemic, the volume of F&V trade between countries in the Mediterranean region collapsed by around 20–30 percentage points. The slowdown has been particularly pronounced in trade relationships between the European Union (EU) and south-eastern Mediterranean countries. According to UN Comtrade data, in 2020 the EU imported 1.5 billion USD less vegetables (a 26 per cent annual decline) and 4.9 billion USD less fruit (a 21 per cent annual decline). In addition, between 2019 and 2020 exports declined from Morocco, Egypt and Israel by 20, 22 and 30 per cent, respectively.

The decline in trade may be explained by several factors. First, the trade of F&V is highly sensitive to economic fluctuations. Second, the measures adopted to limit the spread of Covid-19 (e.g. regional lockdowns, travel restrictions, trade and border

constraints) have hindered labour availability and delayed the delivery of produce (Glauber *et al.*, 2020; Wieck *et al.*, 2020). The containment measures seem to have contributed to

severely disrupting the F&V supply chains, especially in view of the perishable and seasonal nature of the produce and labour requirements (Tamru *et al.*, 2020).



The EU is a main destination market of F&V from Mediterranean countries.

Among the structural factors affecting F&V trade, international policies play a major role for the EU and its Mediterranean partners. The import regime has been under discussion for more than a decade, with several studies suggesting that it may need to be reformed (e.g. Kareem *et al.*, 2017; Santeramo and Gioffi, 2012). Trade policies tend to have multiple effects and are very relevant for emerging and developing economies. For instance, border protection systems may limit trade from less advanced economies (Georgieva *et al.*, 2018), whereas preferential trade agreements tend to favour trade between high-income and low-income economies (Ahmed Hannan, 2016; Divanbeigi *et al.*, 2016; Santeramo and Lamonaca, 2022a).

“ Une révision des politiques visant à éviter que les exportateurs méditerranéens soient fréquemment soumis au paiement de droits de douane excessifs améliorerait les relations commerciales. ”

The set of rules on trade of F&V include complex measures aimed at ensuring the food safety of perishable products, and at improving market integration for high value products (Santeramo and Lamonaca, 2022b). The changes in Mediterranean F&V exports to the EU, observed in 2020 beg the question: was the change mainly due to the pandemic or is it (a further) signal that the import regime needs to be reconsidered? This article examines recent patterns in F&V trade in the Mediterranean region, reflecting on the resilience of the F&V sector during and after the pandemic. It discusses the efficacy of trade agreements involving the EU and other Mediterranean countries, especially those having similar seasonality with the EU (e.g.

Morocco) thus being relevant competitors of EU producers (Gioffi and dell'Aquila, 2004).

Context

The EU is one of the areas that has been more severely affected by the pandemic, and imports of F&V experienced a reduction in the first quarter of 2020 compared to 2019. The growing trend in exports has stopped since March 2020, the 'official' starting period of the Covid-19 pandemic. Between February and March 2020, the UN Comtrade data report a 10 per cent annual reduction in the value of F&V imports; in March 2020 the value of vegetable exports declined by 17 per cent (a loss of 102 million USD) with respect to the previous month, and the export value of fruit fell by 9 per cent (a loss of over 49 million USD).

Among other factors, the effects on trade dynamics also depend on the demand and supply disruptions, for example the collapse of distribution channels (e.g. HoReCa) and consumption disruption (e.g. closure of restaurants) on the demand side (OECD, 2020). Also, logistics problems and the lack of seasonal and migrant workforce impacted on the supply side (e.g. MED-Amin, 2020; Palumbo and Corrado, 2020).

The EU is a main destination market of F&V from Mediterranean

countries. For instance, Morocco is the most important supplier of tomatoes to the EU, and one of the main exporters of oranges and grapes, along with Tunisia and Egypt. Their trade is shaped by numerous agreements, such as preferential trade agreements (e.g. Generalised System of Preferences schemes and other non-reciprocal preferential schemes), associated with interests that need to be considered (Ferrari *et al.*, 2021).

The EU F&V import regime, the Entry Price System, is a border protection scheme that sets a minimum (entry) price for imported F&V, below which an extra duty is applied (art. 181 EU Regulation 1308/2013). Despite this measure, the overlapping production period with EU producers grants a significant advantage to south-eastern Mediterranean countries, which remain key trade partners and negotiate, through preferential trade agreements, preferential trade concessions (Ahmed Hannan, 2016; Osnago, *et al.*, 2016). The privileges of these agreements consist in zero-tariff import quotas or preferential entry price for products under the Entry Price System. However, these concessions do not impede the functioning of the protection system: extra duty is levied on imports whose price is lower than the preferential entry price. Such a border protection



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system has been specifically designed by the EU to limit imports of low-priced products to stabilise the domestic market and reduce competition with Mediterranean countries, especially Morocco, which have similar seasonality (Cioffi and dell'Aquila, 2004).

Approach and evidence

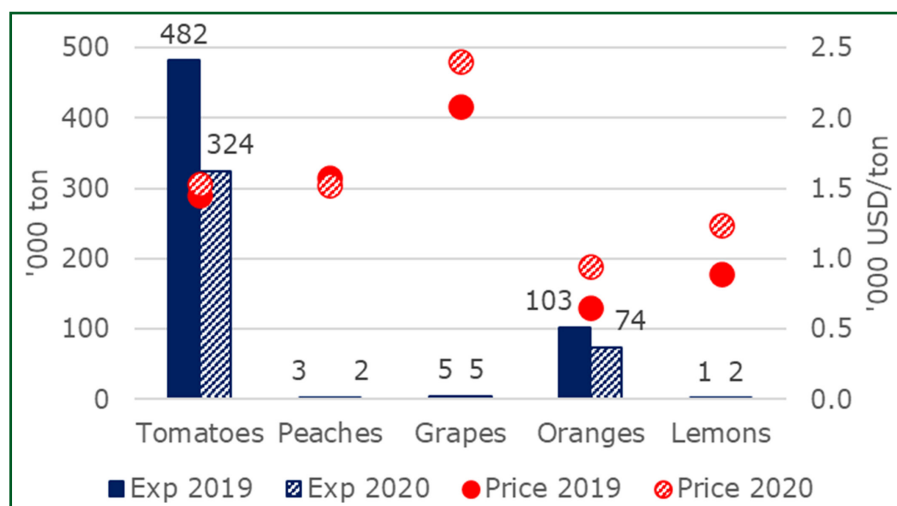
The impacts of the pandemic on the F&V sector and on trade dynamics are evident. We present trends in Moroccan F&Vs export volumes and price to the EU and compare them with dynamics in F&V sectors of other Mediterranean countries.

“ Eine Überarbeitung der Politik zur Vermeidung, dass Exporteure aus dem Mittelmeerraum häufig überhöhte Zölle zahlen müssen, würde die Handelsbeziehungen verbessern. ”

Compared to 2019, in 2020 there was less trade of Moroccan tomatoes and oranges, and stable volumes of grapes and peaches (Figure 1). Similar dynamics are also observed for exports of grapes from Israel and of peaches from Tunisia to the EU. The exports of Moroccan tomatoes and oranges, which have been hit the most (–30 per cent), are coupled with an increase in the average (implicit) prices. The higher price is more marked for storable (an annual increase of about 40 per cent) than for perishable products (10 per cent more than 2019) (Figure 1). This contrasts with the downward trend observed for other Mediterranean countries, such as Israel (due to the commitment on the entry price quota), or Tunisia.

A deeper investigation of monthly data during 2019–2020 allows us to derive further insights. Export volumes of tomatoes drastically decreased during

Figure 1: Trends in Moroccan F&V export volumes and prices to the EU, 2019–2020



Source: Authors, based on data from UN Comtrade.

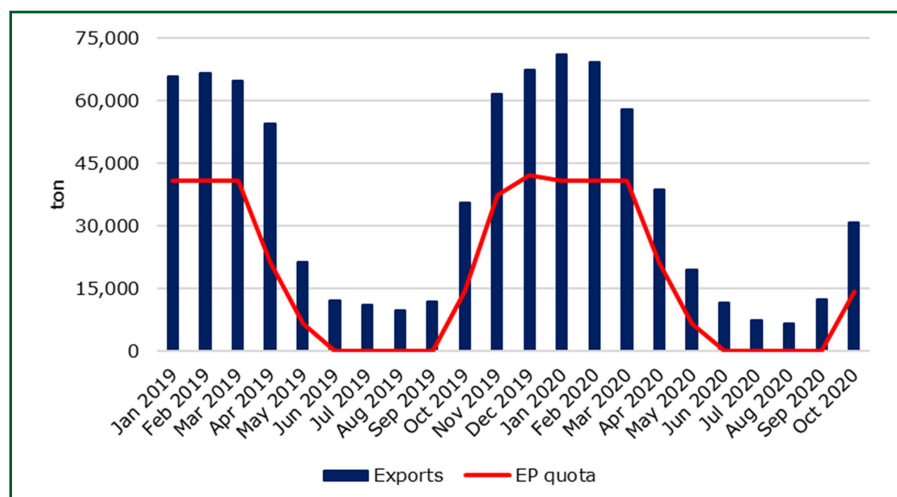
the first wave of the pandemic (a loss of 12 million USD) but recovered during the summer of 2020. Tunisian exports were more stable but suffered a decrease in export prices since May 2020. On the other hand, Moroccan exports, although constrained by the entry price quota (exception made for the summer period during which trade is rather low), have systematically exceeded the zero-tariff import quota but these excesses of supply were lower between March and May 2020 (Figure 2).

It is frequently the case that the price of tomatoes imported from Morocco has been below the threshold entry price for several consecutive days, in which the extra duty is applied (Santeramo *et al.*, 2023). The non-compliance with rules set by the

Entry Price System draws attention to the efficacy of the EU import regime and the interest of Mediterranean countries to revise the system.

Since the start of the pandemic, the volume of F&V exported to the EU declined and (implicit) prices rose. These price increases are likely to be associated with the shocks in supply and the shortages of labour in the EU, due to the lack of foreign seasonal workers. (MED-Amin, 2020). The volumes of imports of F&Vs in the EU account for one third of world imports, and EU production is about 7 per cent of world production. As a net importer, EU trade has a key role in avoiding potential disruption of F&V supply chains. It is reasonable to argue that efforts should be devoted to

Figure 2: Trends in Moroccan tomato market: monthly export volumes and entry price quota



Source: Authors, based on data from UN Comtrade and European Commission.



Morocco is the most important supplier of tomatoes to the EU, and one of the main exporters of oranges and grapes, along with Tunisia and Egypt.

facilitating trade of those products that have been most affected by the effects of the pandemic, whereas a complex import regime, with quotas and entry prices, may amplify the adverse consequences of the pandemic. The pandemic has thus emphasised the opportunity to revisit the system of protection and to increase cooperation with Mediterranean countries.

“ Revision of policies to avoid Mediterranean exporters being frequently subject to the payment of excessive duties would improve trade relationships. ”

Policy recommendations

The analysis of trade of F&V during the pandemic allows us to derive

some recommendations for policymakers:

Export volumes decrease and prices of exported products increase. Higher prices for exported products provide both direct and indirect benefits for Mediterranean countries exporting to the EU. Direct benefits are related to the larger profits, which are associated with the ‘price effect’ that dominates the ‘quantity effect’ (e.g. the reduction in volumes of F&V exported to the EU). Indirect benefits are associated with the circumvention of the border protection system (i.e. Entry Price System): relatively high export prices imply a low probability of incurring extra duties (triggered by low-priced exports). The marked increases in export prices of storable F&V risk potential strategic behaviour by suppliers: exporters may store (low perishable) products when the export prices are below entry prices, and market them when the prices rise above the

entry price threshold (Santeramo *et al.*, 2023).

Seasonality affects variability in export prices. As noted by Cioffi and dell’Aquila (2004) and Cioffi *et al.* (2011), during the harvest season, producers and suppliers in the EU and in south-eastern Mediterranean countries are in competition and prices (which are affected by the discontinuous application of the entry-price regime) tend to be more volatile. As for the competition with Moroccan tomatoes, EU producers are well insulated, and the frequent overshoots (i.e. prices of imported tomatoes below the entry-price threshold) tend to penalise mostly Moroccan producers.

Concessions granted by the EU are stringent. The export capacity of Mediterranean countries is greater than the import quotas granted by the EU in preferential agreements and Mediterranean countries tend to export more than the amount

established by trade quota. Morocco obtained +160 million USD in 2019 and +142 million USD in 2020 from out of quota tomato exports agreed with the EU. This helps to explain why, despite a preferential entry price, Mediterranean exporters tend to export their excess production to the EU.

The short-run impacts of the pandemic on F&V trade seem to have amplified the effects induced by a well-established system of policy interventions in the F&V sector. More precisely, we conclude that: The

long-lasting trade effects of the Entry Price System (i.e. the application of quota and a minimum price for imported goods) are more relevant than the transitory shocks due to economic crises for the F&V sector. South-eastern Mediterranean countries are an important target, given the high value of traded products and the geo-climatic proximity to the EU. A revision of policies to avoid Mediterranean exporters being frequently subject to the payment of excessive duties would improve trade relationships and enhance cooperation in the

Mediterranean region. In particular, the EU policy should be devoted to promoting off-season trade, to avoid competition with domestic producers and limit the imposition of excessive duties to Mediterranean exporters. The limiting effect of the Entry Price System and of preferential agreements for imports of F&V call attention to the effectiveness of these interventions and the usefulness of keeping them in force. A (simplified) system of differentiated quotas, modelled on the seasonality of EU producers, is likely to be a more effective policy tool.

Further Reading

- Ahmed Hannan, S. (2016). *The Impact of Trade Agreements: New Approach, New Insights*. IMF Working Paper, n. 16/117. Washington, DC: International Monetary Fund.
- Cioffi, A., dell'Aquila, C. (2004). The effects of trade policies for fresh fruit and vegetables of the European Union. *Food Policy*, 29(2): 169–185.
- Cioffi, A., Santeramo, F.G. and Vitale, C.D. (2011). The price stabilization effects of the EU entry price scheme for fruit and vegetables. *Agricultural Economics*, 42(3): 405–418.
- Divanbeigi, R., Paustian, N. and Loayza, N.V. (2016). *Structural transformation of the agricultural sector: a primer*. Research & Policy Briefs, n. 2 Washington, DC: World Bank Group.
- Ferrari, E., Chatzopoulos, T., Perez-Dominguez, I., Boulanger P., Boysen-Urban K., Himics, M. and M'barek, R. (2021). *Cumulative Economic Impact of Trade Agreements on EU Agriculture – 2021 Update*. Luxembourg: Publications Office of the European Union.
- Georgieva, D.P., Loayza, N.V. and Mendez-Ramos, F. (2018). *Global trade: slowdown, factors, and policies*. Research & Policy Briefs, n. 12 Washington, DC: World Bank Group.
- Glauber, J., Laborde, D., Martin, W. and Vos, R. (2020). COVID-19: Trade restrictions are worst possible response to safeguard food security. *IFPRI Blog: Issue post*, 27 March.
- Kareem, F.O., Brümmner, B. and Martínez-Zarzoso, I. (2017). European Union Market access conditions and Africa's extensive margin of food trade. *The World Economy*, 40(10): 2277–2300.
- MED-Amin (2020). *COVID-19 crisis impacts on agricultural markets and grains sector in the Mediterranean*. MED-Amin Report. CIHEAM.
- OECD (2020). *Evaluation of the Impact of the Coronavirus (COVID-19) on Fruit and Vegetables Trade. OECD Scheme for the Application of International Standards for Fruit and Vegetables*. Paris: OECD.
- Osnago, A., Rocha, N. and Ruta, M. (2016). *Deep agreements and global value chains. Background paper prepared for the Global Value Chain Development Report 2016*. Washington, DC: World Bank.
- Palumbo, L. and Corrado, A. (2020). *Are agri-food workers only exploited in southern Europe? Case studies on migrant labour in Germany, The Netherlands, and Sweden*. EUI Policy Brief. Open Society European Policy Institute.
- Santeramo, F.G. and Cioffi, A. (2012). The entry price threshold in EU agriculture: Deterrent or barrier? *Journal of Policy Modeling*, 34(5): 691–704.
- Santeramo, F.G. and Lamonaca, E. (2022a). Standards and regulatory cooperation in regional trade agreements: What are the effects on trade? *Applied Economic Perspectives and Policy*, 44(4): 1682–1701.
- Santeramo, F.G. and Lamonaca, E. (2022b). On the trade effects of bilateral SPS measures in developed and developing countries. *The World Economy*, 45(10): 3109–3145.
- Santeramo, F.G., Martínez-Gómez, V., Márquez-Ramos, L. and Lamonaca, E. (2023). The import effects of the Entry Price System. *Journal of Agricultural and Resource Economics* [Forthcoming].
- Tamru, S., Hirvonen, K. and Minten, B. (2020). Impacts of the COVID-19 crisis on vegetable value chains in Ethiopia. *IFPRI Blog: Issue post*, 13 April.
- Torero, M. (2020). Without food, there can be no exit from the pandemic. *Nature*, 580: 588–589.

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Summary


Exports of Fruit and Vegetables from Morocco and other Mediterranean Countries to the EU: Some Policy Recommendations from the Covid Pandemic

 The inward flows of fruits and vegetables in the European Union are regulated by the import regime, consisting of a system of quotas and Entry Prices. The effectiveness of this trade policy has been under investigation since the early 2000s and is (still) debated. The pandemic has offered new insights. Growth in trade of fruit and vegetables (F&V) in the Mediterranean region, especially in Morocco, slowed down during the Covid-19 crisis. While reductions in trade of F&V are likely to be associated with shocks caused by the pandemic, the long-lasting effects of a well-established system of policy interventions in the sector should not be neglected. In other words, the effects of the Covid pandemic have only altered the volumes of F&V trade from Mediterranean countries. However, the continued occurrence of excess (low priced) imports of F&V from the Mediterranean region reinforces policy recommendations that point at the need to reform trade policy. The EU import regime should be simplified, by relaxing the controls on prices of imported F&V, and by negotiating off-season import quotas. The former would shrink running costs while the latter would lower competition among EU producers and Mediterranean exporters.

Exportations de fruits et légumes du Maroc et d'autres pays méditerranéens vers l'Union européenne : quelques recommandations pour l'action publique face à la pandémie de Covid

 Les flux entrants de fruits et légumes dans l'Union européenne sont régulés par le régime d'importation, composé d'un système de quotas et de prix d'entrée. L'efficacité de cette politique commerciale fait l'objet d'études depuis le début des années 2000 et est (encore) débattue. La pandémie a apporté de nouvelles considérations. La croissance des échanges de fruits et légumes dans la région méditerranéenne, notamment au Maroc, a ralenti pendant la crise du COVID-19. Même si ces réductions seront probablement associées aux chocs provoqués par la pandémie, les effets à long terme d'un système bien établi d'interventions publiques dans le secteur ne doivent pas être négligés. En d'autres termes, les effets de la pandémie de COVID n'ont fait que modifier les volumes d'échanges de fruits et légumes en provenance des pays méditerranéens. Cependant, la persistance d'importations excédentaires (à bas prix) de fruits et légumes en provenance de la région méditerranéenne renforce les recommandations d'action publique qui soulignent la nécessité de réformer la politique commerciale. Le régime d'importation de l'Union européenne devrait être simplifié, en assouplissant les contrôles sur les prix des fruits et légumes importés et en négociant des quotas d'importation hors saison. La première action réduirait les coûts de fonctionnement tandis que la seconde réduirait la concurrence entre les producteurs européens et les exportateurs méditerranéens.

Obst- und Gemüse-Exporte aus Marokko und anderen Mittelmeerländern in die EU: Politikempfehlungen aufgrund der Covid-Pandemie

 Die Einfuhr von Obst und Gemüse in die Europäische Union wird durch Einfuhrvorschriften, die aus einem System von Quoten und Einfuhrpreisen bestehen, geregelt. Die Wirksamkeit dieser Handelspolitik wird seit Anfang der 2000er Jahre untersucht und ist umstritten. Die Pandemie hat neue Erkenntnisse gebracht. Das Wachstum des Handels mit Obst und Gemüse im Mittelmeerraum, insbesondere in Marokko, hat sich während der COVID-19-Krise verlangsamt. Während der Rückgang des Handels mit Obst und Gemüse wahrscheinlich mit den durch die Pandemie verursachten Schocks zusammenhängt, sollten die langfristigen Auswirkungen eines gut etablierten Systems politischer Interventionen in diesem Sektor nicht vernachlässigt werden. Mit anderen Worten: Die Auswirkungen der COVID-Pandemie haben nur den Umfang des Handels mit Obst und Gemüse aus den Mittelmeerländern verändert. Das anhaltende Auftreten überschüssiger (Niedrigpreis-)Einfuhren von Obst und Gemüse aus dem Mittelmeerraum unterstreicht jedoch die Notwendigkeit einer Reform der Handelspolitik hinweisen. Die EU-Einfuhrregelung sollte vereinfacht werden, indem die Preiskontrollen für eingeführtem Obst und Gemüse gelockert und Einfuhrkontingente außerhalb der Saison ausgehandelt werden. Ersteres würde die laufenden Kosten senken, während letzteres den Wettbewerb zwischen den EU-Erzeugern und den Händlern im Mittelmeerraum verringern würde.

summary