Food Self-Sufficiency: An Analysis of a Defeated Czech Bill
On January 20, 2021, the Chamber of Deputies of the Parliament of the Czech Republic approved an amendment to the Food Act proposed by the Freedom and Direct Democracy Party (SPD), which implements an unprecedented anti-market measure in the form of food sales quotas into Czech legislation. The legal norm favors Czech producers over foreign competitors by setting minimum quotas for specific foodstuffs sold (not offered) in retail outlets with an area of more than 400 square meters. However, this amendment is a completely unnecessary state intervention in the principles of the free market and free international trade. These would positively impact economic rents for a narrow interest group of domestic agricultural producers, but would negatively impact the rest of the society, particularly by reducing the freedom of choice of consumers and retailers, reducing the availability of selected foods, upward pressure on prices, etc.

Arguments put forward by sponsors of the legislation can be summed up as: 

"[1] will enable regional food producers to better establish themselves in the domestic market, [2] help [...] maintain employment in rural areas and ultimately [3] reduce the carbon footprint by reducing food imports across Europe."

The controversy surrounding the issue is evidenced not only by the heated expert debate, which has seen absurd arguments from the proponents of the regulation, but also by the declarations of eight EU countries with a negative opinion on the plan, as
well as the debate on the inconsistency of the regulation with EU law.

The Senate of the Parliament of the Czech Republic has rejected an amendment to the Food Act proposed by a group of MPs to increase food self-sufficiency. The bill was ultimately rejected, after pressure mounted on the Prime Minister to not support this bill. However, food self-sufficiency is an idea that never dies, and it is certain to make a comeback sooner or later. The relevant interest groups have lobbied for thirty years and are unlikely to give up. We therefore consider the issue not moot and analyze it.

This study provides a brief analysis of the text of the proposal and a description of the current situation on the Czech food market.

A PROBLEMATIC BILL
The key passage of the amendment to the Food Act is the following text:

“(3) A food business operator operating a retail outlet shall ensure that the proportion of selected staple foods from the short supply chain [...] sold to final consumers in each retail outlet operated by him is

(a) a minimum of 55% in calendar year 2022, [...] 

g) a minimum of 73% in calendar year 2028 and subsequent years.”

CRITIQUE
There are several problems with the proposal – it is illegal under both EU and WTO law, it is very poorly drafted and would lead to perverse outcomes for the retailers, resulting in sub-optimal allocation of resources and bigger environmental impact. The selection of the items is so absurd and frivolous it borders on the ridiculous.

ECONOMIC AND LEGAL PROBLEMS
According to the Liberal Institute, in terms of the economic problems of food self-sufficiency, “the proposal is anti-consumer, non-environmental, illegal, and helps dominant players such as the Agrofert Group”

In addition to the legal problems, according to press reports, ambassadors to the Czech Republic have objected to the bill and so has the European Commission itself.

Rulings of the Court of Justice of the European Union (CJEU) in Costa v. ENEL (6/64), Pubblico Ministero v. Ratti (148/78), and other cases state that EU law is superior to national law and takes precedence over national law in case of conflict between the two. If the expert community agrees that the bill in question contradicts superior law, and the European Commission has signaled the same, it is reasonable to assume that the strong players in the market would rate the chances of a final victory before the CJEU as high and would not address these provisions of the bill.

However, as smaller market players are more risk averse and have fewer resources to litigate, there is a strong presumption that they would be more likely to comply with the provisions than large market players, putting them at a disadvantage and making them irreversibly damaged after a future presumed ruling of illegality of the bill.

---

5 Ibid., p.7ff.
PROBLEMS WITH ITEM SELECTION
The authors of the bill do not explain how they have drawn up the list of foodstuffs covered by this legislation. It remains unclear why, for example, potatoes are included but not Coca-Cola, since both foods originally came from the Americas but are now produced exclusively from local sources.

It is also not clear why there are items on the list that are practically impossible to produce in the Czech Republic. An example for all of them is item 10.84.30 Food salt. The Czech Republic, having neither salt mines nor sea, is thus at a considerable disadvantage in the production of salt.

"Occurrences of [halite] in the Czech Republic are insignificant, e.g., Ostrava (in mines, stalactites formed from the salt content of topsoil), larger deposits are in Slovakia (Solivar near Prešov, Michalovce), Austria (Hallstadt, Bad Ischl – Triassic), Poland (Wieliczka), Germany (Stassfurt, Hannover) or the Garabogazköl lagoon (Caspian Sea)." Production in Solivar was discontinued in 2009.

PROBLEMS WITH COUNTING BY TOTAL WEIGHT
The bill states that the proportion is calculated on the "total volume of food [...] sold by the operator [...] in relation to the total volume of food", where volume here means weight ("expressed in units of weight"). Why the weight of, for example, potatoes, milk, and sunflower seeds should be added together is not explained.

The law can thus be complied with by excessive sales of cheap (and purposefully even more cheapened) but substantial domestic food, which the Czech consumer likes to buy, compared to foreign and more expensive food, which the Czech consumer buys in smaller weights. For example, an average Czech consumer consumes 70 times less beans than potatoes. According to the FAO, the Czech Republic has a self-sufficiency rate of 0% for beans, while the

"SINCE THE CZECH REPUBLIC IS A FREE COUNTRY AND A MARKET ECONOMY, RETAIL OUTLETS CANNOT FORCE CONSUMERS TO BUY CZECH FOOD OVER IMPORTED FOOD – AT MOST, THEY CAN INCENTIVIZE THEM, FOR EXAMPLE, WITH A LOWER PRICE OR AN ADVERTISING CAMPAIGN"
Czech Statistical Office (CZSO) reports a self-sufficiency rate of over 100% for potatoes (according to the FAO data, potatoes have a self-sufficiency rate of 78%).

**PROBLEMS WITH THE OBLIGATION TO SELL IN EVERY SHOP**

According to the bill, the obligation is to sell, not just offer, specified weights is in “any [...] retail establishment”.

Since the Czech Republic is a free country and a market economy, retail outlets cannot force consumers to buy Czech food over imported food – at most, they can incentivize them, for example, with a lower price or an advertising campaign. However, as small and specialized (and probably also internet) shops are exempted from the regulation, shops may find themselves in a situation at the end of the year where they will need to sell a larger share of Czech food to catch up with the mandatory share. They may thus find themselves selling, e.g., potatoes, well below cost, leading to waste, deadweight losses, and excessive emissions.

The supermarket chains can solve this problem more easily by having stores sell their goods within the chain at the end of the year in such a way that the discount promotions are the least profitable for them. Small players do not have this option.

**DATA**

The data used for the following analysis is a compilation of three sources:

1. One set of data comes from the Czech Statistical Office (CZSO). CZSO publishes data on food consumption and on harvesting, including household harvests. The data must be recalculated according to the mean of population. The data used is for 2019, own calculations. Methodology: self-sufficiency = per capita production / per capita consumption x 100.

2. Another set of data comes from the Report on the state of agriculture in the Czech Republic in 2018, the so-called Green Report. It contains calculations for selected foodstuffs, whereas the data is used for the last published year. Methodology can be found in Ibid.

3. A third set of data comes from the Food and Agriculture Organization of the United Nations. 2019 data is used, supplemented with our own calculation according to the methodology available in the FAO Statistical Pocket Book:

   self-sufficiency = production x 100 / (production + imports – exports).

---


13 Ibid., Table 2.


Even in the CZSO data, the items are not broken down according to the CZ-CPA 2015 classification used in the bill, so the following subchapter is a gross figure for the whole category, not broken down by a more detailed classification, as the bill would require. Since the law does not assume that the standard is met for each item separately, we believe that the data obtained in this way is sufficient for an analytical judgement on the Czech market.

**DATA FOR INDIVIDUAL ITEMS**
Table 1 shows the level of self-sufficiency for each item according to the three sources. Items with self-sufficiency below 73% are shown in bold.

As a side note, we have contacted selected manufacturers and importers to obtain further data. According to Danone’s reply and its own calculations, the self-sufficiency in yoghurt production is 110.5%. Yoghurt is listed as entry 10.51.52 Yoghurt and other fermented or acidified milk or cream, but the individual ingredients of yoghurt (such as milk and fruit) are already listed in the table above, as it is based on data from producers, not processors or retailers.

**BRIEF COMMENTARY ON SELECTED ITEMS**
To further highlight the absurdity of the proposal and to bring home how unworkable this bill (should it ever become law) would be, let us make a brief commentary on selected items.

**TOMATOES: 19% SELF-SUFFICIENCY**
The current situation does not meet regulatory expectations. Tomato is a fruit for which growing conditions in the Czech Republic are favorable only seasonally and depending on the weather. Countries with better growing conditions, particularly in the subtropical zone, have absolute and relative comparative advantages, reflecting the availability of goods all year round at prices affordable to all classes of the population. Ignoring the advantages of foreign importers implies higher production costs (greenhouse cultivation), which will lead to higher prices or reduced availability of tomatoes.

For the items listed below, essentially the same geographic and economic conclusions apply, so let us not repeat them.

**FRUIT: LOW SELF-SUFFICIENCY (EXCEPT FOR APPLES AND CHERRIES)**
As Table 1 suggests, the Czech Republic is inefficient in the production of almost all fruits, be it wine grapes, pears, apricots,
Table 1: Self-Sufficiency for Specific Foodstuffs in the Czech Republic

<table>
<thead>
<tr>
<th>Item</th>
<th>Self-sufficiency</th>
<th>Data source</th>
<th>Item</th>
<th>Self-sufficiency</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans</td>
<td>0.00%</td>
<td>FAO</td>
<td>Cherries</td>
<td>102.56%</td>
<td>CZSO</td>
</tr>
<tr>
<td>Peas</td>
<td>144.90%</td>
<td>FAO</td>
<td>Peaches</td>
<td>13.92%</td>
<td>CZSO</td>
</tr>
<tr>
<td>Other green leguminous vegetables</td>
<td>52.94%</td>
<td>FAO</td>
<td>Plums</td>
<td>46.78%</td>
<td>CZSO</td>
</tr>
<tr>
<td>Soya beans</td>
<td>64.10%</td>
<td>FAO</td>
<td>Other pome and stone fruit</td>
<td>39.47%</td>
<td>FAO</td>
</tr>
<tr>
<td>Mustard and rapeseed</td>
<td>103.64%</td>
<td>FAO</td>
<td>Strawberries</td>
<td>23.65%</td>
<td>CZSO</td>
</tr>
<tr>
<td>Sunflower seeds</td>
<td>21.62%</td>
<td>FAO</td>
<td>Natural honey</td>
<td>81.82%</td>
<td>FAO</td>
</tr>
<tr>
<td>Other oilseeds</td>
<td>266.67%</td>
<td>FAO</td>
<td>Beef</td>
<td>121.60%</td>
<td>Green Report</td>
</tr>
<tr>
<td>Cabbage</td>
<td>47.20%</td>
<td>CZSO</td>
<td>Pork</td>
<td>51.50%</td>
<td>Green Report</td>
</tr>
<tr>
<td>Lettuce salad</td>
<td>63.50%</td>
<td>CZSO</td>
<td>Mutton</td>
<td>102.60%</td>
<td>Green Report</td>
</tr>
<tr>
<td>Spinach</td>
<td>53.55%</td>
<td>CZSO</td>
<td>Poultry meat</td>
<td>72%</td>
<td>Green Report</td>
</tr>
<tr>
<td>Paprika</td>
<td>20.74%</td>
<td>CZSO</td>
<td>Vegetables</td>
<td>31.50%</td>
<td>Green Report</td>
</tr>
<tr>
<td>Cucumber salad and cucumber pickles</td>
<td>27.26%</td>
<td>CZSO</td>
<td>Fruit and nuts</td>
<td>77.10%</td>
<td>Green Report</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>19.30%</td>
<td>CZSO</td>
<td>Other animal fats</td>
<td>54.29%</td>
<td>FAO</td>
</tr>
<tr>
<td>Carrots, turnips, and turnips</td>
<td>48.15%</td>
<td>CZSO</td>
<td>Sunflower oil, crude</td>
<td>166.67%</td>
<td>FAO</td>
</tr>
<tr>
<td>Garlic</td>
<td>28.04%</td>
<td>CZSO</td>
<td>Canola, rapeseed, and mustard oil, crude</td>
<td>180.75%</td>
<td>FAO</td>
</tr>
<tr>
<td>Onion</td>
<td>43.15%</td>
<td>CZSO</td>
<td>Other oils</td>
<td>131.25%</td>
<td>FAO</td>
</tr>
<tr>
<td>Potatoes</td>
<td>101.99%</td>
<td>CZSO</td>
<td>Milk</td>
<td>137.80%</td>
<td>Green Report</td>
</tr>
<tr>
<td>Potatoes</td>
<td>78.07%</td>
<td>FAO</td>
<td>Milk</td>
<td>109.62%</td>
<td>FAO</td>
</tr>
<tr>
<td>Wine grapes</td>
<td>59.77%</td>
<td>FAO</td>
<td>Butter</td>
<td>50.00%</td>
<td>FAO</td>
</tr>
<tr>
<td>Apples</td>
<td>75.29%</td>
<td>CZSO</td>
<td>Sugar</td>
<td>187.09%</td>
<td>FAO</td>
</tr>
<tr>
<td>Pears</td>
<td>53.29%</td>
<td>CZSO</td>
<td>Eggs</td>
<td>90.60%</td>
<td>Green Report</td>
</tr>
<tr>
<td>Apricots</td>
<td>40.29%</td>
<td>CZSO</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own calculation based on statistical data for Hungary
peaches, plums, or strawberries. The only exceptions are apples and cherries – both fruits are not very demanding and do not need sustained high temperatures. The region of Central Europe’s comparative advantage surely does not lie in producing fruits. For example, Faro in Southern Portugal registers around 3,000 hours of sunshine annually\(^\text{18}\), meanwhile Prague registers only about half\(^\text{19}\).

"According to the Vegetable Growers’ Union of the Czech Republic, the self-sufficiency of the Czech Republic is lower than 30%, for example in the production of cucumbers, tomatoes, cauliflowers, kohlrabi, or garlic, while in the case of onions or potatoes the current self-sufficiency is higher than 55%. The situation is similar in fruit production – although self-sufficiency in the dominant fruit, apples, is around 60%, this is rather exceptional. A number of other species, such as apricots, are well below 55%, and some species, such as currants, gooseberries and similar species, are currently grown in the Czech Republic only to a very small extent,” comments an agricultural analyst Petr Havel in the press\(^\text{20}\).

Havel also addresses claims made by the sponsors of the bill that Czech farmers will increase production of foodstuffs that are currently under the bill’s limits:

“It is not possible to increase production year-on-year, often by even one percent, because it requires considerable investment and because the climatic conditions are unsuitable for the increase in fruit and vegetable production in the Czech Republic. Not all crops can be grown in greenhouses. And for those that can be grown, greenhouses must be built – and this is expensive and takes time, certainly not just one year,” explains Havel further\(^\text{21}\).

SALT, BEANS, YEAST: ZERO SELF-SUFFICIENCY

Completely without any sense of reality, the bill also included items in which the Czech Republic has zero self-sufficiency. In addition to salt, mentioned previously, these include beans or yeast. The comparative advantage for these foodstuffs lies elsewhere:

\(^{18}\) Current Results (2021) Average Sunshine a Year in Portugal. Available [online]: https://www.currentresults.com/Weather/Portugal/annual-sunshine.php


\(^{21}\) Ibid.
In the European Union, the most cultivated legumes are peas, with more than half the share, and broad beans, with less than 10%. Lupin, beans, lentils, and vetches are grown to a lesser extent. [...] Lentils are mainly imported from Canada, common beans mainly from Ethiopia, China and Myanmar, and other types of beans mainly from China.22

Yeast is also not produced in the Czech Republic. Importers import it "from Hungary, Poland, France, Ukraine and several other European countries"23.

GARLIC AND ONIONS: 28% AND 43% SELF-SUFFICIENCY
Opinions on garlic are diametrically opposed – according to Horace, it is "more baneful than hemlock"24, but according to the tastes of contemporary consumers, garlic, with its higher essential oil content and stronger taste, is increasingly popular. "The interest in garlic is huge and is not decreasing. On the contrary, our garlic is also increasingly in demand abroad," says domestic garlic breeder Jan Kozák25. The fact remains, however, that the Czech supply of garlic is far from sufficient to meet demand – according to data, Czech supply does not satisfy even a third of domestic demand, and must be imported from Spain or China, among others.

The current COVID-19 pandemic has shown that global supply chains are robust and work even in unusually challenging times full of movement restrictions. Czech consumers have plenty of garlic available even in this situation. However, Czech society is at a significant disadvantage in the event of a large-scale vampire attack.
The current COVID-19 pandemic has shown that global supply chains are robust and work even in unusually challenging times full of movement restrictions.

Onion finds less use in combating imaginary threats of supply chain disruption or mythical creatures. It is imported to the Czech Republic from countries as diverse as Egypt and New Zealand. Rather than crying tears, one should be filled with joy when cutting a vegetable so well-traveled.

SUNFLOWER SEEDS: 21% SELF-SUFFICIENCY

Already the 19th-century French economist Frédéric Bastiat wrote ironically that “the sun [...] has for that haughty island [perfidious Albion] a respect that he does not show for us”26. And while Bastiat’s example is a complaint by candle-makers about unfair competition from the sun, the growers of sunflowers, a flower that turns after the sun, see it the other way round. For their commodity, on the contrary, more sunshine is more favorable. And while the Czech Republic, unlike the United Kingdom, according to FAO data, does produce at least some sunflower seeds, it cannot compare with countries such as Romania or Bulgaria, which produce one to two orders of magnitude more tons of sunflower seeds.

However, unlike the bill’s sponsors, Bastiat27 knew that free trade leads to prosperity.

CONCLUSION

The proposal to increase the food self-sufficiency of the Czech Republic is not only anti-consumer, it is non-ecological and illegal. It is also discriminatory, aimed at helping the big players in production and sales. It is also confusingly written and does not reflect the situation in Czech agriculture.

The content of the bill lacks economic rationale, nor does it reflect the basic principles of international trade (absolute and relative comparative advantages of production and exchange). Moreover, it was proposed in an emergency (the COVID-19 pandemic) and the targets set as early as 2022 provided minimal room for domestic producers to react, especially in view of the significant investments expected in production processes. Even so, the expected negative effects of the amendment would not be eliminated, and the regulatory burden would ultimately be shifted by the supply chain to the consumer, who would bear the most significant part of the economic costs in saturating preferences.

Therefore, it is recommendable that the Parliament ultimately rejected this proposal, and it is further advised that in the future the Czech Parliament spends its time on better ideas.

For the agro-lobby, increased food self-sufficiency is one of their long-held wishes, one can read about it in most of their media appearances as well as in their own documents. Politicians in the populist parties will, no doubt, try to implement same or similar measures – maybe more skillfully drafted – in the upcoming 2021–2025 term. Ultimately, the bill was killed only when the Prime Minister realized its illegality under EU law and instructed his own party, ANO, to drop its support. It is, therefore, of utmost importance that liberals have their arguments ready when the next attempt comes up.

—

MARTIN PÁNEK

Director of the Liberální Institut based in Prague, the Czech Republic