

# Possible impacts of the Czech agricultural policy after the EU accession on the land market and land usage

## *Možné dopady zemědělské politiky ČR po vstupu do EU na strukturu využití zemědělského půdního fondu ČR*

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**Abstract:** The Czech agricultural policy after the EU accession is the set of both the EU and national measures related to the Czech agro-food sector. The paper defines possible scenarios of the agricultural policy developments in 2004–2013 and presents expected impacts of the policy scenarios on the Czech farm structure and land usage.

**Key words:** agriculture, agricultural policy, distribution of supports, land market, land usage, farm structure

**Abstrakt:** Zemědělská politika ČR po vstupu do EU je množinou opatření EU a národních opatření ve vztahu k agrárnímu sektoru ČR. Příspěvek vymezuje možné scénáře vývoje zemědělské politiky ČR v období 2004–2014 a představuje očekávané dopady těchto scénářů do podnikatelské struktury zemědělství ČR a do struktury využití zemědělského půdního fondu ČR.

**Klíčová slova:** zemědělství, zemědělská politika, distribuce podpor, trh půdy, využití zemědělské půdy, struktura zemědělských podniků

### INTRODUCTION

The Czech Ministry of Agriculture in the co-operation with the Research Institute of Agricultural Economics Prague (VUZE) has worked out the Conception of the Czech Agricultural Policy after the EU Accession for the Period of 2004–2013. The main objective of the Conception is to start off essential structural changes in the Czech agriculture for its better preparedness on the expected conditions under the EU Common Agricultural Policy (CAP) and under the European and world markets. The Conception formulates basic pillars and time phases of the agricultural policy, but at the same time it is the open document supposing a continuous updating depended on 10 banticipated future policy decisions in this field. These decisions will influence the further restructuring of the Czech agriculture, including the farm and land usage structures.

It is supposed that policy decisions related to the allocation of direct payments and to the land market

would principally influence the process of restructuring (Ciaian, Swinnen 2003). The article is oriented on a general definition of possible policy scenarios (options) in this field (part 1) with the respect to the present supply and demand on the Czech land market (part 2). Expected impacts of the policy scenarios on the Czech farm and land usage structures are presented in part 3. To the conclusion, the policy scenarios are assessed from the points of the income distribution, the effectiveness of agriculture and the fulfilment of the long-term goals of the Conception.

### 1. POSSIBLE POLICY SCENARIOS RELATED TO THE ALLOCATION OF DIRECT PAYMENTS AND THE LAND MARKET

According to the Conception, Czech farmers would receive in the period of 2004–2013 in principle the following five categories of supports: direct pay-

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ments, structural (non-investment) supports under the Horizontal Rural Development Plan (a half of which represents payments in Less Favourable Areas – LFA), structural (investment) supports under the Operational Programme for Agriculture, state aid and market price supports. Besides the supports, Czech farms will be influenced by other measures like cross compliance (conditions for direct payments) and other general conditions for farming.

For our purposes, from the whole set of policy measures of the Conception, we concentrate on the following supports and measures:

- ways of the distribution of direct payments: with a simplification, there is a question of the following options:
  - partial decoupling;
  - full decoupling with area payments (per hectare of agricultural land);
  - full decoupling with farm payments (Simplified Farm Payments, with eligibility/non-eligibility for new entrants);
- ways of the distribution of LFA payments<sup>1</sup>:
  - only on grassland;
  - on all agricultural land;
- legislation related to the land market:
  - enforcement of a law implementing a compulsory leasing of land for a long-term period, including the level of rents;
  - non-acceptance of the law.

Besides the above-mentioned measures, other measures there are expected with the relation to the Czech land market:

- privatisation of the state land according to the latest legislation;
- supports for purchasing of private land by farmers through the Support and Guarantee Farm and Forestry Fund (SGFFF) in the form of interest subsidies for long-term bank credits;
- restrictions for foreigners to acquire the Czech land according to the latest legislation;
- land taxes according to the latest tax legislation;
- possibilities to receive direct payments on the set-aside land (keeping with the Good Farming Practices conditions);
- conditions for new entrants in the farm sector according to the Agricultural Law.

Based on this, the following scenarios and sub-scenarios of future policy decisions under the Czech agricultural policy are defined:

Scenario A – Partial or full decoupling of direct payments on all eligible agricultural land and LFA payments only on grassland

A1 – Without the enforcement of the law on land leasing and rents

A2 – With the enforcement of the law on land leasing and rents

Scenario B – Full decoupling of direct payments on all eligible agricultural land and LFA payments on all eligible agricultural land

B1 – Without the enforcement of the law on land leasing and rents

B2 – With the enforcement of the law on land leasing and rents

## 2. CHARACTERISTICS OF THE PRESENT CZECH AGRICULTURE IN THE RELATION TO THE LAND MARKET

Utilised agricultural land of the Czech Republic (Utilised Agricultural Area – UAA) with 3.62 mil. ha according to the structural survey of the Czech Statistical Office (CSO) 2003 (ZEM 2003) roughly equals with the acreage of the eligible agricultural land for direct payments. This acreage represents about 3.7 mil. ha (the potential eligible area according to Ekotoxa Opava), or about 3.5 mil. ha (the really claimed area of farms in 2004), respectively. However, the total acreage of the Czech agricultural land according to the Czech Cartographic Authority amounts to about 4.3 mil. ha. The difference 0.6–0.8 mil. ha between this acreage and the UAA acreage is not considered in the article. It means, it is neither explained nor considered on the land market.

A final demand for agricultural land is raised by users of the land – functioning (existing) or new entering farms. For our purposes, it is reasonable to define the following farm categories:

- very small subsistence farms (self-supplying households) or hobby farms (SF);
- family farms – full-time or part-time (FF);
- large individual farms or partnership farms or the large number of limited liability companies (IF);
- collective farms with a significant or growing ownership/decision making power in the hands of a limited number of managers (CF-M);
- other collective farms with still dominated ownership/decision making power in the hands of members or shareholders (CF-O);
- other farms (O).

<sup>1</sup> From the point of view of their eligibility and final effects, the LFA payments are similar to the category of direct payments (being paid only in the defined Czech territories, of course).

The primary demand for agricultural land is increasingly stimulated by estate agencies, which to a large extent cover various transaction costs linked with the marketing of the land and which can act for speculative and other interests on the land market.

Supply of agricultural land is currently represented by the following subjects – categories of landowners:

- State: about 620 thousands ha of agricultural land (at the end of 2003) is owned by the state (and administered by the Czech Land Fund); the land is mainly destined to be privatised by the form of a compensatory restitution, or by the form of a direct sale according to legislative rules, respectively (GOV);
- Land in the ownership of municipalities and other non-profit institutions (forasmuch as they are selling or leasing the land to farms) (MUN);
- Entrepreneurs – farms:
  - physical entities – self-employed landowners (PE)
  - legal entities (LE)
- Physical persons – self-employed on farms as legal entities (PP-LE);
- Other physical persons (OPP):
  - living in localities, where they own the land (OPP-L);
  - living out of localities, where they own the land (OPP-O)<sup>2</sup>.

There is a big discrepancy between the land ownership and the land usage: in average almost 90% of agricultural land on farms is leased with the following relations: the larger acreage of a farm, the larger share of leased land. However, these relations have been gradually changing.

The estimated shares of individual categories of land users and landowners on the present Czech land market of the UAA (3.6 mil. ha of agricultural land) are shown in Table 1.

Agricultural land as a market subject has a regionally very heterogenic quality from the point of view its productivity and its utility potentials. Table 2 presents this heterogeneity by the Czech districts. For illustration, each administrative district is classified in 3 categories according to the following criteria:

- share of arable land in the total acreage of agricultural land;
- natural conditions (the score of land productivity, average altitude and average sloping);
- social sensitivity (share of agricultural land in LFA);
- agro-environmental sensitivity to environmental measures (the score by the share of agricultural land and grassland in national parks, landscape protected areas, nature protected localities, water protected areas and nitrate sensitive areas<sup>3</sup>);

Table 1. Shares of individual subjects in the Czech UAA<sup>1)</sup>

Users/Owners	GOV	MUN	PE <sup>3)</sup>	LE	PP-LE	OPP	Total (1000 ha)	Total (%)
SF			40				40	1.11
FF	30	5	205			185	425	11.81
IF <sup>2)</sup>	320	10	65	60		1 150	1 605	44.58
CF-M	125	5		40	75	395	640	17.78
CF-O	110	5		20	180	540	855	23.75
O	35						35	0.97
Total (1000 ha)	620	25	310	120	255	2 270	3 600	100.00
Total (%)	17.22	0.69	8.61	3.33	7.08	63.06	100.00	x

<sup>1)</sup>Utilised Agricultural Area 3.6 mil. ha

<sup>2)</sup>Large individual farms and limited liability companies

<sup>3)</sup>Land leased by PE to other categories of farms is included in OPP

Source: Reports on Czech Agriculture 2001–2003, CSO survey 2003, survey under ACE project 2000, Agrocensus 2000 (CSO), own estimates

<sup>2</sup> It is supposed that the majority of these landowners are living in towns and cities. A part of the land is already in the ownership of non-Czech physical persons or companies.

<sup>3</sup> It would be reasonable to complete this sensitivity criterion by the share of land in NATURA 2000, in erosive and flood sensitive areas, etc. However, more exact data by the districts are not available yet.

Table 2. Territorial view on the quality of the Czech UAA

NUTS	District	% arable land <sup>1)</sup>	Natural cond. <sup>2)</sup>	% LFA <sup>3)</sup>	Agro-envi <sup>4)</sup>	% CF <sup>5)</sup>
1100	Praha	1	1	1	1	1
2101	Benešov	1	3	3	2	3
2102	Beroun	1	3	2	2	2
2103	Kladno	1	1	1	2	1
2104	Kolín	1	1	1	1	2
2105	Kutná Hora	1	2	1	2	3
2106	Mělník	1	1	1	3	2
2107	Mladá Boleslav	1	1	1	3	3
2108	Nymburk	1	1	1	2	2
2109	Praha-východ	1	1	1	1	2
2110	Praha-západ	1	2	1	2	2
2111	Příbram	2	3	3	1	3
2112	Rakovník	1	2	2	2	1
3101	České Budějovice	1	2	2	2	3
3102	Český Krumlov	3	3	3	3	1
3103	Jindřichův Hradec	2	2	3	2	2
3104	Písek	1	2	3	1	3
3105	Prachatice	3	3	3	3	2
3106	Strakonice	1	3	3	1	3
3107	Tábor	1	3	3	2	3
3201	Domažlice	1	3	3	1	3
3202	Klatovy	2	3	3	2	2
3203	Plzeň-město	1	1	1	2	2
3204	Plzeň-jih	1	2	2	2	3
3205	Plzeň-sever	1	2	2	1	3
3206	Rokycany	1	3	2	1	3
3207	Tachov	2	3	3	2	1
4101	Cheb	3	3	3	3	1
4102	Karlovy Vary	2	3	3	2	1
4103	Sokolov	3	3	3	3	1
4201	Děčín	3	3	3	3	1
4202	Chomutov	2	2	2	1	1
4203	Litoměřice	1	2	1	3	2
4204	Louny	1	2	1	2	1
4205	Most	1	2	1	1	1
4206	Teplice	2	2	2	2	1
4207	Ústí nad Labem	3	3	3	2	1
5101	Česká Lípa	2	2	2	3	2
5102	Jablonec nad Nisou	3	3	3	3	2
5103	Liberec	3	3	3	2	2
5104	Semily	2	3	3	3	3
5201	Hradec Králové	1	1	1	1	3
5202	Jičín	1	2	1	1	3

Continuation Table 2

NUTS	District	% arable land <sup>1)</sup>	Natural cond. <sup>2)</sup>	% LFA <sup>3)</sup>	Agro-envi <sup>4)</sup>	% CF <sup>5)</sup>
5203	Náchod	2	2	2	3	2
5204	Rychnov nad Kněžnou	2	2	2	3	3
5205	Trutnov	2	3	3	2	2
5301	Chrudim	1	2	2	3	3
5302	Pardubice	1	1	1	1	3
5303	Svitavy	1	2	2	3	3
5304	Ústí nad Orlicí	2	2	2	3	3
6101	Havlíčkův Brod	1	3	3	2	3
6102	Jihlava	1	2	3	1	3
6103	Pelhřimov	1	3	3	2	3
6104	Třebíč	1	2	2	1	3
6105	Žďár nad Sázavou	2	3	3	3	3
6201	Blansko	1	2	2	2	3
6202	Brno-město	1	1	1	2	3
6203	Brno-venkov	1	2	1	2	3
6204	Břeclav	1	2	1	2	2
6205	Hodonín	1	2	1	3	3
6206	Vyškov	1	2	1	1	3
6207	Znojmo	1	1	1	2	3
7101	Jeseník	2	3	3	2	2
7102	Olomouc	1	1	1	1	3
7103	Prostějov	1	1	1	2	3
7104	Přerov	1	2	1	1	3
7105	Šumperk	2	2	2	2	3
7201	Kroměříž	1	2	1	1	3
7202	Uherské Hradiště	1	2	1	2	3
7203	Vsetín	3	3	3	3	2
7204	Zlín	2	3	2	2	2
8101	Bruntál	3	3	3	1	1
8102	Frýdek - Místek	2	3	2	1	2
8103	Karviná	2	2	1	1	2
8104	Nový Jičín	1	2	2	2	3
8105	Opava	1	2	2	1	2
8106	Ostrava - město	1	1	1	2	2
	Total 1 (1000 ha)	2 510	645	1 319	1 168	542
	Total 2 (1000 ha)	875	1 777	1 024	1 670	941
	Total 3 (1000 ha)	324	1 287	1 366	871	2 226
	Total CR (1000 ha)	3 709	3 709	3 709	3 709	3 709

<sup>1)</sup>Share of arable land: 1 = high (above 70%); 2 = medium (40–69%); low (to 40%)

<sup>2)</sup>Natural conditions: 1 = very good; 2 = average; 3 = worse

<sup>3)</sup>Share of LFA: 1 = low (up to 29%); 2 = average (30–70%); high (over 70%)

<sup>4)</sup>Agro-environmental sensitivity: 1 = weak; 2 = medium; 3 = strong

<sup>5)</sup>Share of collective farms (CF) in land: low (up to 19%); 2 = medium (20–50%); high (over 50%)

- farm structure (e.g. the share of collective farming in the UAA of a district).

The Czech agricultural land market is still undeveloped and imperfect, with more barriers, or with high transaction costs incurred, respectively. The large number of the barriers descends from the past, as a heritage from the socialist regime. There is particularly the question of the extreme fragmentation of the landownership, the uncompleted ownership identification of plots, the lower flexibility of the state administration in the registration of ownership/usage changes, a very slow progress in the land consolidation in cadastres, problems with the physical identification of plots and problems with the physical access to fields.

As regards the actual prices of agricultural land in the Czech Republic, they are many times lower compared with the prices in the EU-15 countries. At the same time, it is symptomatic that – as a rule – the Czech land prices (rents) are much higher for dynamic farms than for farms with the “status quo” behaviour<sup>4</sup>.

### 3. POSSIBLE IMPACTS OF VARIOUS POLICY SCENARIOS ON THE CZECH AGRICULTURE

Land users – farms – are getting into relations with landowners on the land market. The next presented impacts of the policy scenarios are based on the following suppositions:

- Land users demand (another) land, if the marginal annual value of production (or of total incomes including direct payments per hectare, respectively) from each further leased (bought) land unit equals to the annual rent (or to the equivalent of the annual rent in the case of a purchase of land, respectively) increased by transaction costs incurred to realize a lease (purchasing) contract of the land unit.
- To the contrary, if land users behave rationally, they should get rid of the land.
- The land price (or the rent, respectively) reflects supply/demand relations, but with many specific factors involved (the scarcity of land, potentials for a non-agricultural utilisation – the vicinity to larger housing, industrial or recreational localities, legislative limits for a utilisation of land, etc.). Nevertheless, the level and the way of distribution

of direct payment (including LFA payments) have strong influence on the land prices.

- There is an equal approach to direct payments. It means that all farm categories, even the smallest ones, are able to cope with administrative requirements linked with direct payments, including *cross compliance* conditions. However, transaction costs to receive direct payments (which decrease the supports in reality) can significantly differ.

In these relations – and especially in transitive economies – other factors can play an important role. There is particularly the question of the “future expectations” factor (however, which can be considered as all above mentioned suppositions transferred to the future), or the “stability of standard of living and employment” factor (which is important especially in such economies and farm sectors like in Poland).

The general view on relations between policy measures and land market is shown in Table 3. The same for individual scenarios see Table 4.

#### Scenario A1

- A larger part of direct payments would leach to the landowners. Under a perfect land market and with no transaction costs on the market all direct payments could be transferred to the landowners. Because the Czech land market is not perfect, the share of direct payments leaching to the landowners can be estimated to about 30–50%, but with a growing tendency accompanying gradual improvements of the market.
- This process would be realised through a gradual growth of rents and land prices. The value of assets would increase for the land-users with their own land.
- The land market would significantly enliven, supported by activities of various estate agencies. The demand for land (in the enlargement of leased land or ownership, or – inversely – in maintaining of the present leased land, respectively), stimulated by the SGFFF supports, would show all farm categories (with a possible exception in the case of the SF category).
- Non-agricultural and foreign capital (companies, intermediaries, physical person according to the Foreign-Exchange Law) would enter the Czech land market in a larger extent.

<sup>4</sup> According to the FADN data, rents paid by farms of the FF or IF categories are three to four times higher than rents paid by farms of the CF category (particularly in LFA).

Table 3. Policy measures and their influence on land market and land usage

Measure	Land market		Land usage restructuring
	demand	supply	
Level of direct payments (DP)	++	±	±
Cross compliance	++	±	++
Way of DP distribution	2004–2008 (partial decoupling)	±	–
	after 2008 SFP only for “old farms”	+	– –
	after 2008 SFP also for “new entrants”	+	++
LFA payments	only on grassland	++	++
	on all agricultural land	++	–
Land consolidation	++	++	+
AGRO-ENVI programmes	±	±	++
SGFFF supports for land purchases	+	+	±
Land privatisation	++	++	+
Land Leasing Law	+	+	++/– –
Foreign-Exchange Law	–	±	±
Land taxes	±	+	±
Agricultural Law	–	±	±

- In spite of barriers for the entry into farming (according to the Agricultural Law Nr. 85/2004), it would be also possible to expect a growing interest of landowners from the OPP-L category to cancel the actual lease contracts and to start their own farming (probably in the SF or FF categories).
- As a whole, there could be expected the enlargement of the land acreage in the ownership of farms (from the present about 10%, particularly to the detriment of landowners in the GOV and OPP categories), and the increase of the share of large farms with more than 1 000 ha (especially in the IF and CF-M categories) in the UAA (from the present about 61%, particularly to the detriment of farms in the CF-O category). The number of farms in the SF category could increase, accompanied by a very moderate growth of their total acreage.
- In LFA regions, the orientation of farms on the enlargement of the acreage of grassland would sharpen. The present share of grassland in LFA is about 41%. The potential of supports is not then fully utilised (however, an enlargement of grassland would lead to lower per ha average payments). This orientation would be limited by the expected unwillingness of landowners to convert arable land into grassland.
- Potentials for extensive farming and for the utilisation of agro-environmental programmes, reaching

to about 2.5 mil. ha, would be realised starting from regions with the highest agro-environmental sensitivity (on about 900 thousands ha).

#### Scenario A2

- The conservation of the present land usage structure of the UAA and a limited development of land prices/rents without links to direct payments would largely survive. As a consequence, the leaching of direct supports to landowners would significantly decrease.
- Under these conditions, “passive” farms that do not want to enlarge their own or leased land would gain profits. The similar effects could be gained on farms (and for their managers), whose land is mainly in the ownership of physical persons of the OPP category (the lower level of rents for farms, or better suppositions for purchases of land from the OPP landowners, respectively).
- In any case, the transfers of land among individual categories of farms and the continuation of needed restructuring of the Czech agriculture would have worse conditions. The dynamics of changes in the farm structure would significantly slow down, but with the possible continuation of transformations

Table 4. Impact of policy scenarios

Scenario	A1	A2
	direct payments (partial, full decoupling)/ha	direct payments (partial, full decoupling)/ha
	LFA on grassland	LFA on grassland
	without the Land Leasing Law	Land Leasing Law
Owners	++ direct payments (rents, value of assets)	min. leakage of supports, + value of assets
Users	increasing share of own land	increasing share of own land
Demand	++ (farms, non-agr. and foreign capital)	+ (farms – local monopolies)
Farm structure	++ IF a CF–M (+ SF); – CF-O	slow down of changes in the user structure
Land use structure	++ share of grassland in LFA (from 41 %)	++ share of grassland in LFA (from 41 %)
	++ extensive farming and AGRO-ENVI	++ extensive farming and AGRO-ENVI
	++ set-aside	++ set-aside
Scenario	B1	B2
	SFP, “new entrants” – enabled	SFP, “new entrants” – enabled
	LFA on all land	LFA on all land
	without the Land Leasing Law	Land Leasing Law
Owners	lower leakage of supports	min. leakage of supports, + value of assets
Users	maintenance of status quo	maintenance of status quo
Demand	lower demand	lower demand
Farm structure	slow down of changes	outstanding slow down of changes
Land use structure	slow down of grassland in LFA	slow down of grassland in LFA
	++ extensive farming and AGRO-ENVI	++ extensive farming and AGRO-ENVI
	++ set-aside	++ set-aside

from the CF-O farms to the CF-M farms, or from the CF-M farms to IF farms, respectively.

- The land usage structure of the UAA would be similar as in the scenario A1, but with better opportunities to utilise some agro-environmental programmes.

### Scenario B1

- Regardless the land (soil) quality, direct payments would be spared on farms (but only in the relations to landowners). However, if new entrants would be eligible for direct payments under the SFP system (applying e. g. a reserve national system), a part of direct payments would leach to landowners. Nevertheless, this leaching would not be so extreme as in the scenario A1.
- The SFP payments could slow down the restructuring inside farms and from this even their ef-

fectiveness. However, this hypothesis would not be valid, if also new entrants are eligible for direct payments.

- Similar effects could be expected with the respect of a lower dynamics in the farm structure development. However, the dynamics could approach the development under the scenario A1, if also new entrants are eligible for direct payments.
- The release of LFA payments on all eligible agricultural land could slow down the enlargement of grassland in the regions with the worse natural conditions.

### Scenario B2

In summary, the implementation of the B2 scenario would lead to a minimum leaching of direct payments from land-users to landowners, but at the same time



the further restructuring of the Czech agriculture would be slowed down. However, opportunities to utilise some agro-environmental programmes could increase.

## CONCLUSIONS

The decisions about the future Czech agricultural policy under EU conditions, particularly as regards the ways of distribution of direct payments and the legislation related to the land market, can significantly influence the farm and land usage structure and the further restructuring of the Czech agriculture. If it is necessary to apply the distribution of direct payments through the SFP system, it would be reasonable to enable also new entrants on the UAA to receive the payments. However, with the consent that the expected positive effects could be accompanied with a higher leakage of direct payments from land-users to landowners and with a more rapid growth of land prices.

The restructuring, not the conservation (stabilisation) of the present farm and production structure of the Czech agriculture, should be one of the highest priorities of the agricultural policy. The needed restructuring is conditioned by the more perfect land market and by the reduction of transaction costs on the market. From these reasons, the Czech agricultural policy should be more oriented on removing barriers on the land market, or it should resist temptations to create new impediments and bottlenecks on the market.

These conclusions are in compliance with the EU analytical studies, e. g. Ciaian, Swinnen 2003; Swinnen, Frankem 2003; Lerman 2001 and others.

## REFERENCES

- Ciaian P., Swinnen J.F.M. (2003): Market Imperfection and Agricultural Policy Impacts in the New EU Member States. Katholieke Universiteit Leuven, World Bank (to be published).
- Doucha T. (2004): Šance a rizika vstupu do EU pro české zemědělství (Chances and risks of EU accession for the Czech agriculture). In: Proceedings from the Conference International Scientific Days 2004: European Integration – Challenge for Slovakia. Slovak Agricultural University, Nitra.
- Lerman Z. (2001): Agriculture in transition economies: From common heritage to divergence. *Agricultural Economics*, 26: 95–114.
- Swinnen J.F.M., Frankem L. (2003): Land Rental Markets and Households Farms in Transition: Theory and Evidence from Hungary. LICOS Working Paper.
- Zprávy o stavu zemědělství ČR 2001–2003 (2002–2004) (Green Reports on the Czech Agriculture 2001–2003). Ministry of Agriculture CR – RIAE.

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