

Wild and domestic pigs (*Sus scrofa domesticus* and *Sus scrofa ferus*) in Prehistoric Times of Romania: paleoeconomical importance

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The study addresses the issue of the role played by swine (domestic pig and wild boar) in the food economy of prehistoric communities from Romania. Multiple Correspondence Analyses is used to analyse the relations between different categories of variables: historical culture and regions (Moldavia, Muntenia, Oltenia, Dobrudja, Banat, Transylvania) (Figure 1), while at the same time emphasizing the synchronic and diachronic differences. The separation between domestic and wild forms is difficult due to their coexistence in samples and bones fragmentation. In the case of the Neolithic settlements, the abundance of domestic pig remains is an indicator of the sedentary life of the communities.

The analysis of the domestic pig remains frequency shows that at the beginning of the Neolithic their share is very small (under 5%), indicating that these communities had a high mobility due to the necessity of providing food for cattle, sheep, goat. Domestic pig frequency begins to increase (till 20-25% of the assemblage) towards end of the Neolithic, suggesting a more sedentary life of the communities from this period (Gumelnita and Salcuta Cultures) (Figure 2). Data for the samples belonging to the Early Neolithic (Starcevo Cris Culture) are rather sparse. In the Neolithic samples, domestic mammals have a more significant share compared to the wild mammals. The share of pig remains does not exceed that of cattle, sheep and goat. In the Neolithic samples domestic mammals have a more significant share compared to the wild mammals.

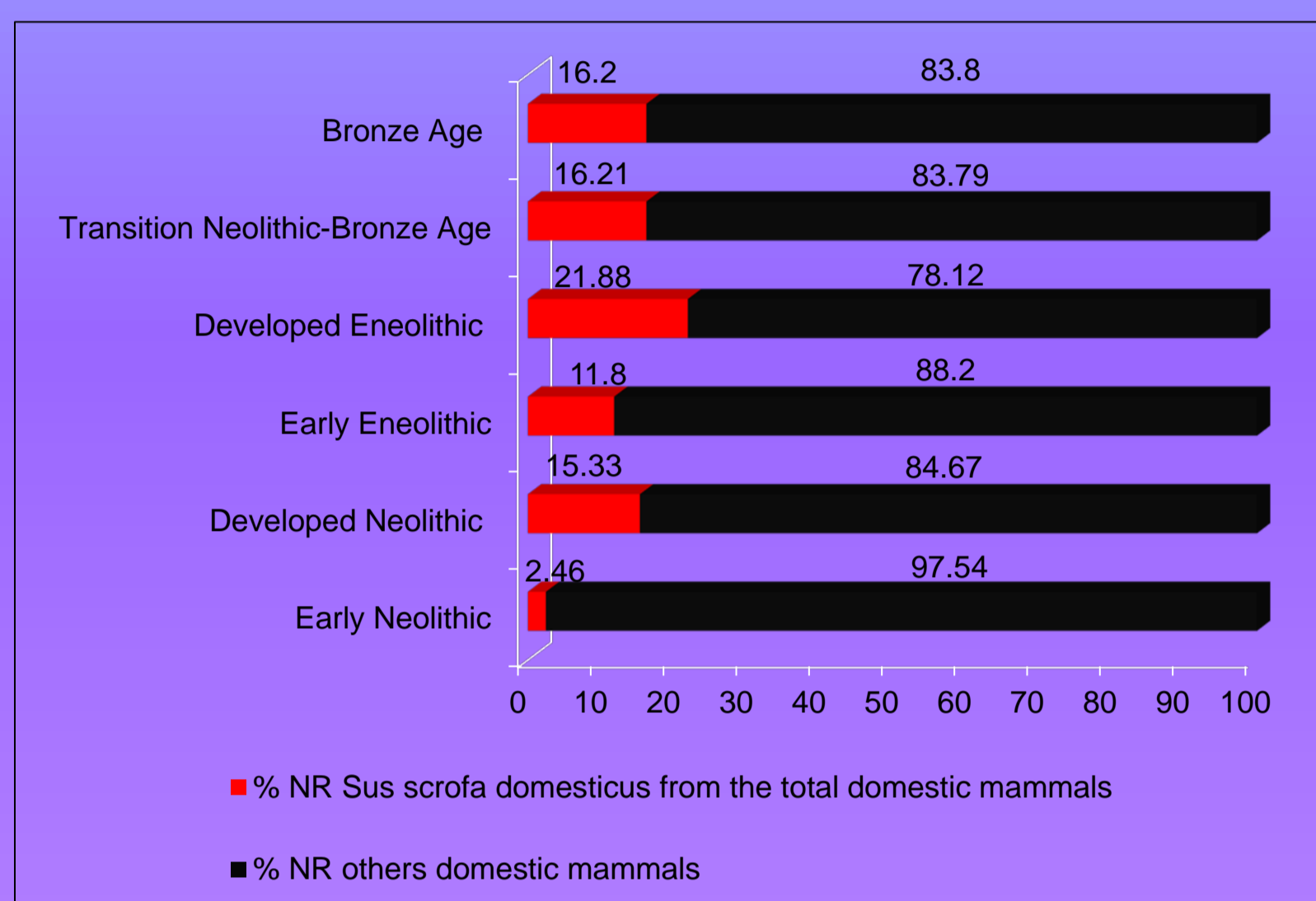


Figure 2. *Sus scrofa domesticus* frequencies (%NISP) compared to the others domestic mammals.

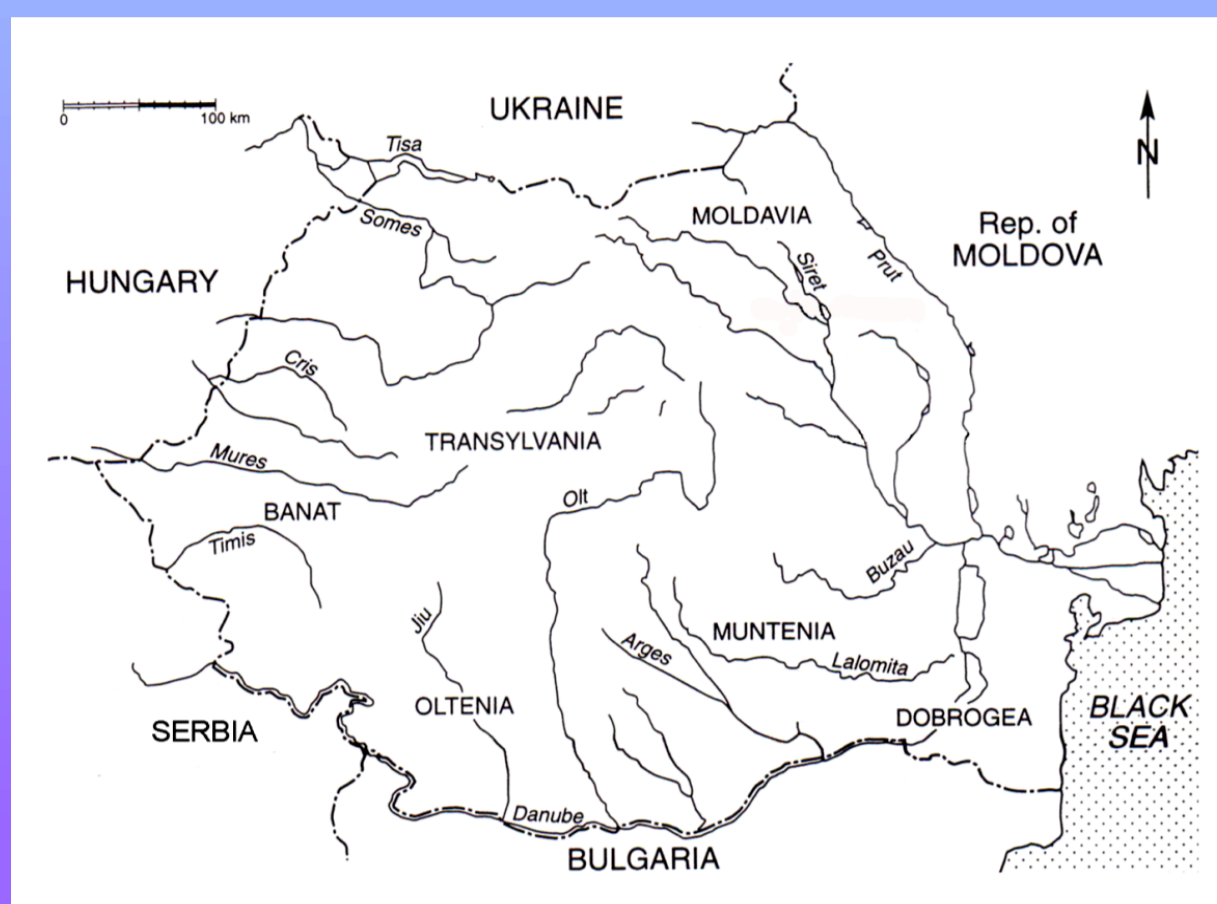


Figure 1. Map of Romania showing the historical regions.

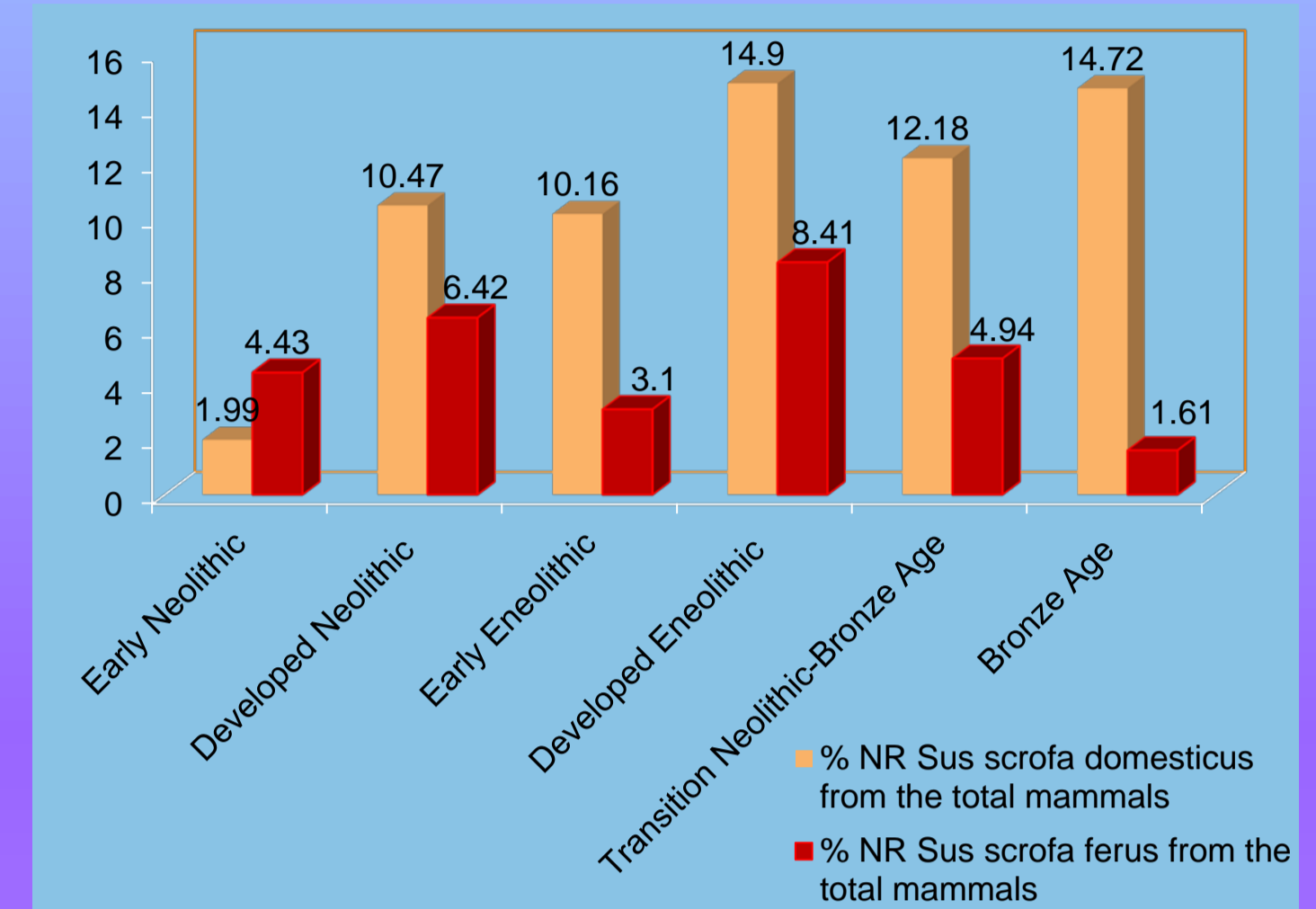


Figure 3. Domestic pig and wild boar proportion in prehistoric samples of Romania.

Multiple analysis results are shown in the diagram (Figure 4). The relationship between the three variables are interpreted according to their position in the diagram. Correspondence analysis results are supported by graphical representation of the percentage of the two species in the regions during the Neolithic and Bronze Age (Figures 5, 6). The percentage of each species was calculated based on the total number of wild and domestic mammals. Banat and Transylvania position on the graph is explained by the dominant values of pigs and wild boar.

In prehistory, slaughter age varies in different communities; pigs were killed predominantly at 12-18 months and 18-24 months, when reached an optimal weight. Adult individuals (over 2 years) are identified in fewer settlements and in small percentage, being kept for reproduction. There are settlements with pigs killed predominantly prior one year; killing can be influenced by food available for animals, the food needs for human population. Optimal weight for pig was reached to age two, because they were primitive, with slow growth. Pig was exploited exclusively for primary products (meat, skin, fat). In many settlements had grown into a state of semi-freedom in the surroundings, which favor domestic interbreeding with the wild form.

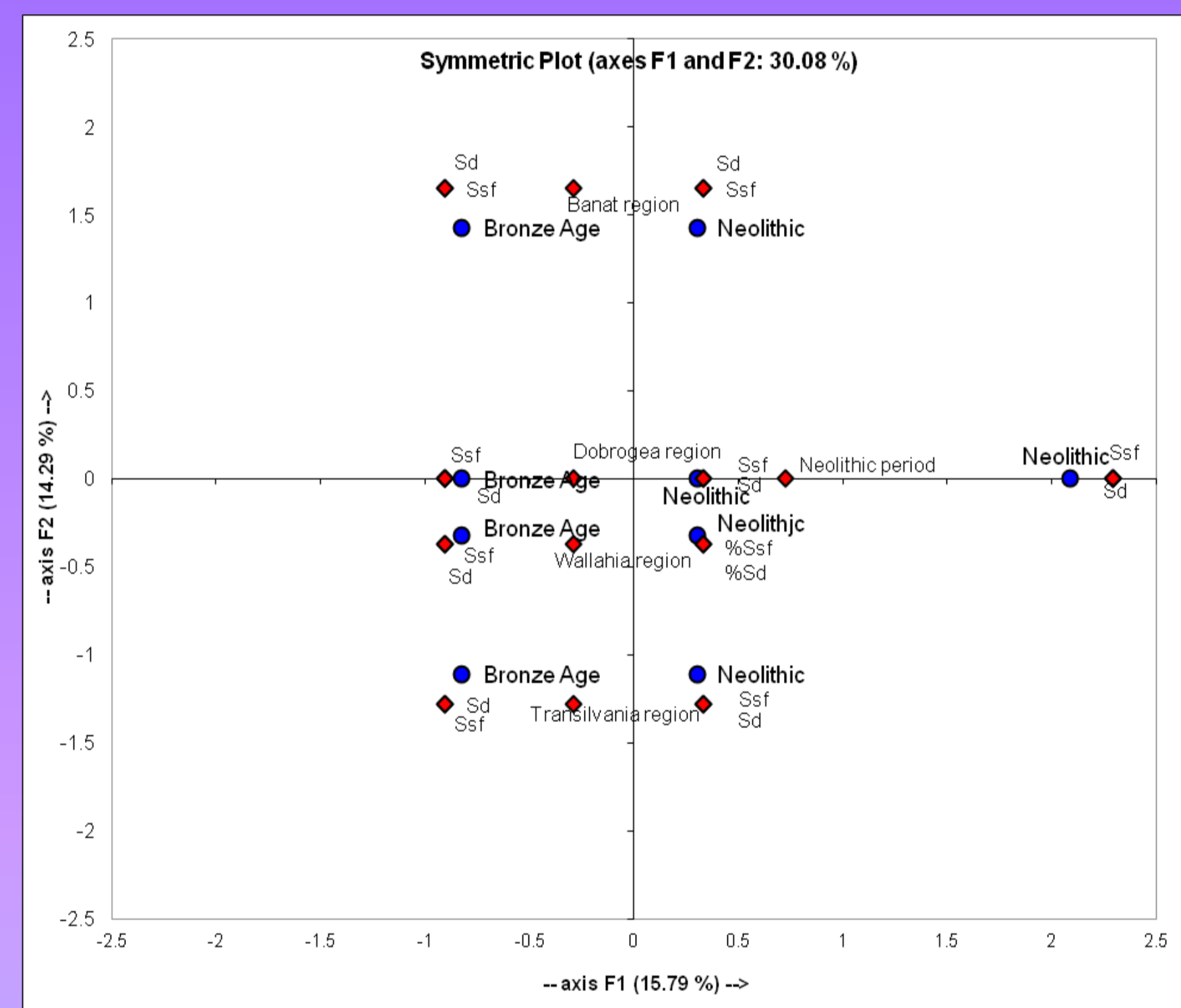


Figure 4. Multiple correspondence analysis (Ssf – *Sus scrofa ferus*, Ssd – *Sus scrofa domesticus*).

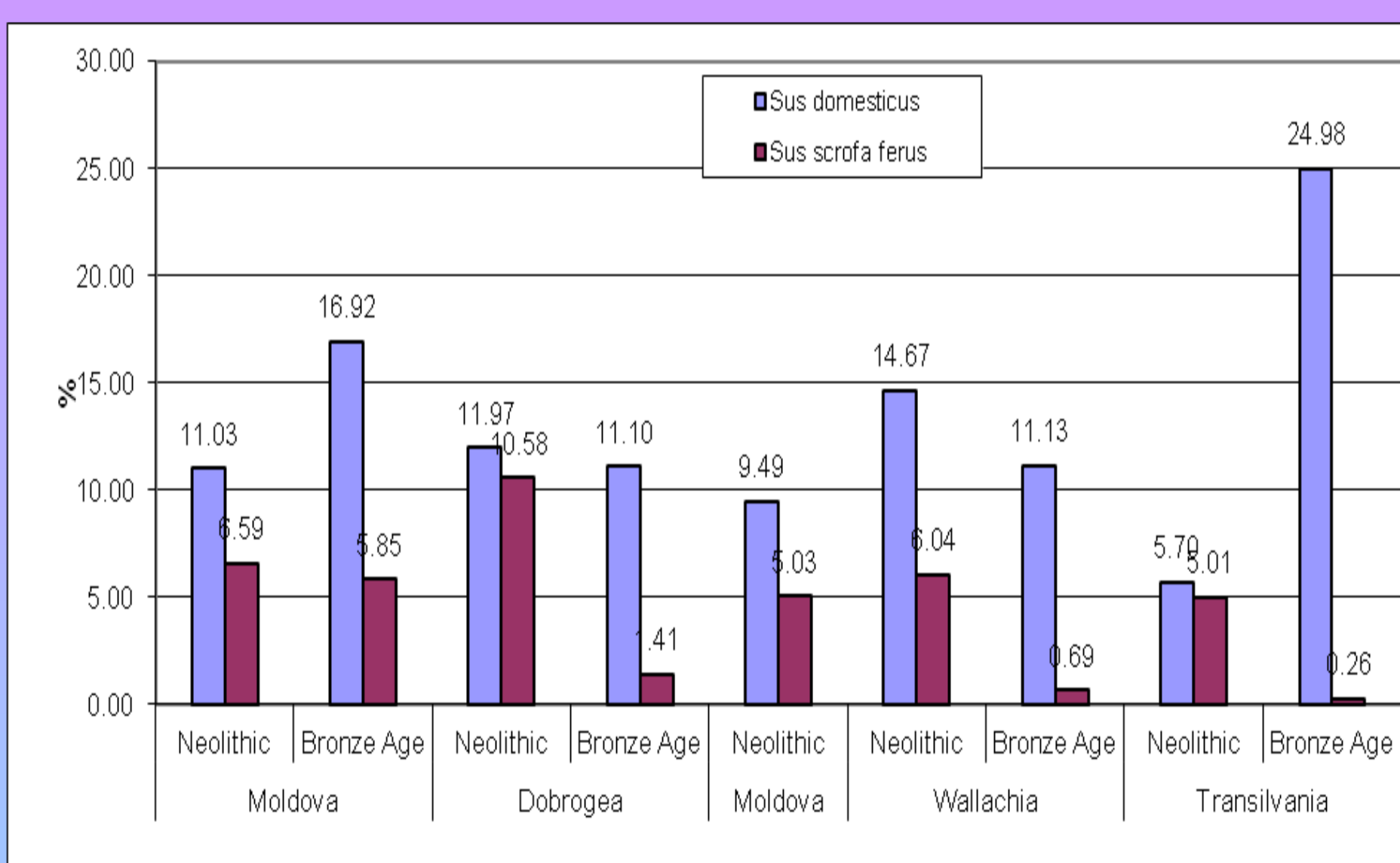


Figure 5. Percentage of *Sus scrofa ferus* and *Sus scrofa domesticus* from all mammals remains.

The wild boar is a commonly identified species in the samples from the Neo-Eneolithic Age. Ecologically speaking, this species is considered a forest one, though it may also be found on floating reed islands, in reeds and in the islands of the Danube Delta. The discovery of this species in the plain settlements from the Neo-Eneolithic period is an argument for the fact that the south of Romania was once covered by large deciduous forests. The Neolithic communities' most frequently hunted species were the red deer, followed by the wild boar, roe deer and auroch.

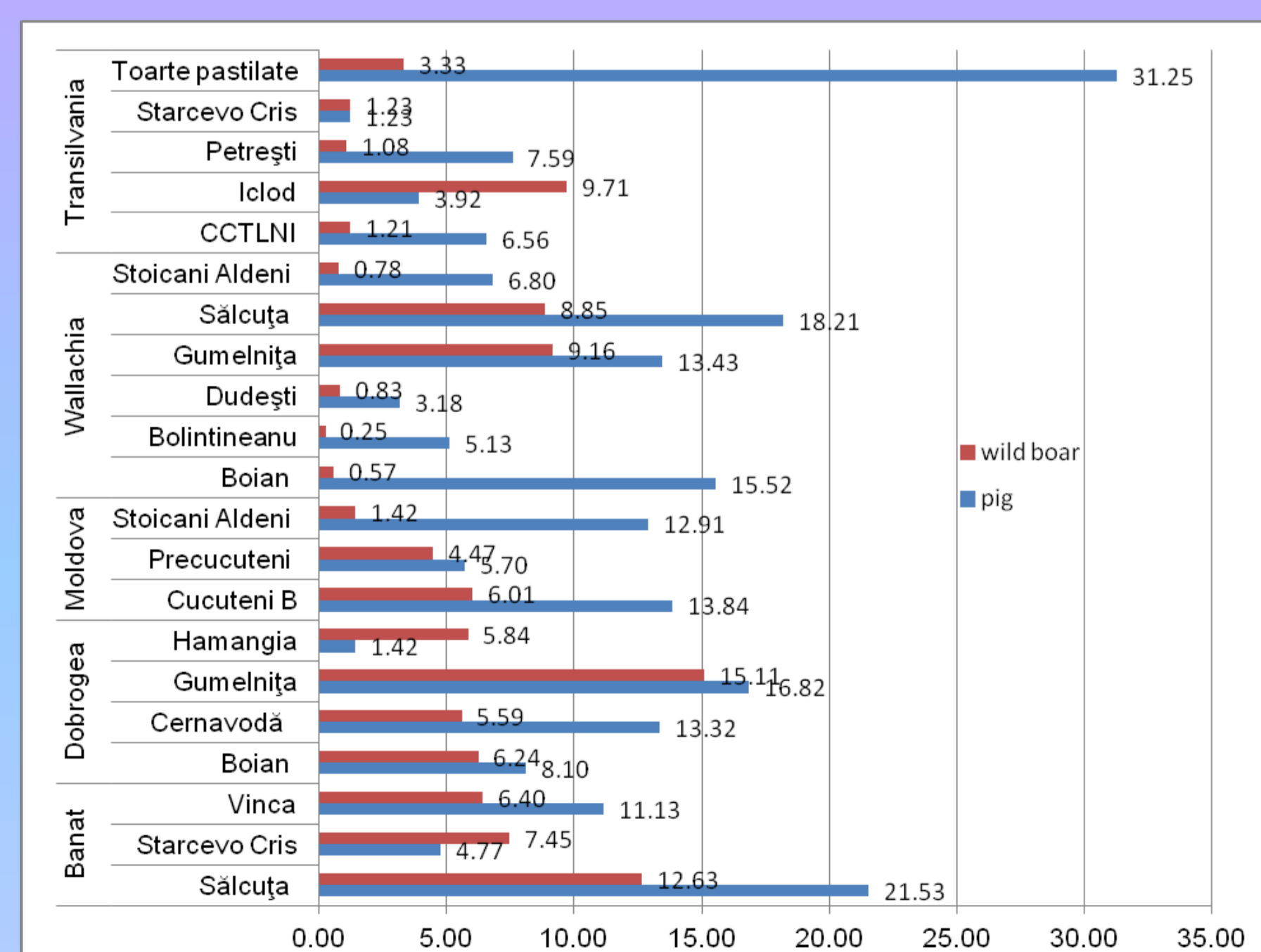


Figure 6. Ratio (%) of wild boar and pig from all identified mammals.

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