

First (preliminary) estimates of the value added of faked and counterfeit goods

1. Introduction

Nowadays, faked and counterfeit goods and services or fraud with them are common phenomena. Especially, as a lot of luxury goods have very high prices, the temptation is great to counterfeit them, so that e.g. everybody can afford a Rollex-watch, which he/she normally could never afford. In this short paper, a first attempt is made, to estimate the value added of fraud and/or counterfeit goods and services of four different items. In section 2 the results are presented and discussed and in section 3 some short elaborations are made with report to: (i) types of fraud in each sector and (ii) future areas of fraud as well as similar activities and (iii) a statement about the cost of fraud.¹⁾

¹⁾ These statements are short and rudimentary, as we have very little scientific knowledge about these three areas.

2. The value added of fraud, faked and counterfeit goods and services over 1996-2000

In the following, preliminary (i.e. rough) estimates²⁾ have been undertaken to calculate the value added of fraud, faked and/or counterfeit goods and services for the following four items:

- (1) Food and drink,
- (2) drugs, illegal and medicine,
- (3) counterfeit goods, and
- (4) electronic/e-commerce, electronic security.

The values, which are preliminary and rough estimates, have a confidence error interval of +/- 15%; they are presented in table 1.

Table 1

With the turn “value added” it is meant, what are the monetary values of faked (or counterfeit) goods and services or the ones of fraud with these goods and services. Hence, the value added (monetary values) are **not** the costs, these activities cause firms, a society or a whole country. In table 1 in the first line the value added of fraud, faked and counterfeit-items in the area of food and drink are presented. In the year 1996 it was 21.6 mio. EURO and this increases 1999

²⁾ The estimation procedures which have been used are the soft modelling approach, the DYMIMIC (multiple indicator, multiple causes estimation procedure) and for some years, especially 2000, first and preliminary values from other countries, especially Switzerland and Germany have been used as a benchmark case, to calculate the values for Austria. The use of such estimation procedures have been described in detail in Schneider and Enste, **Schattenwirtschaft und Schwarzarbeit: Umfang, Ursachen, Wirkungen und wirtschaftspolitische Empfehlungen**, 2000, München-Wien: R. Oldenbourg-Verlag, and Schneider and Enste, **Shadow Economies: Size, Causes, and Consequences**, Journal of Economic Literature, 2000, Vol. 38/1, pp.77-114.

up to 23.1 mio. EURO in the year 2000 a slight decrease of 22.7 mio. EURO took place. On average, over 1996-2000, the value of fraud, faked and counterfeit-items in the area of food and drink is 22.5 mio. EURO. If we consider the growth rates, the average growth rate is 2.5% for item 1 (food and drink) and the highest growth rate was from 1996-1997 with 3.2%. If we go to the next item, illegal drugs and medicine, we observe a value of 33.4 mio. EURO for the year 1996 and this value rises up 43.2 mio. EURO for the year 2000. The average over these five years of item 2 (illegal drugs and medicine) was 38.7 mio. EURO. The growth rates are declining overtime; i.e. 9% from 1996 to 1997 to 8.2% from 1997 to 1998 and to 4.6% from 1998 to 1999. The average growth rate was 6.7% of item 2 (illegal drugs and medicines).

Item 3 are counterfeit goods, where it is very difficult to obtain estimates, because these values are mostly the values of the net turnover sold in Austria and it was not possible to give some reliable estimates to what extend the production of these counterfeit goods and services has been taken place in Austria, as there is no reliable data available.

The counterfeit goods, from which the value added has been estimated in this study, are

- (1) Clothes (mostly expensive and/or designer clothes),
- (2) leather clothes (including shoes),
- (3) watches,
- (4) jewelery,
- (5) sports wear,
- (6) sports articles,
- (7) toys (model toys, electronic toys),
- (8) cameras (video, normal, digital),

- (9) entertainment products (radio, cd-players, etc.), and
- (10) parfumes and cosmetics.

Due to a lack of reliable data it was not possible to estimate the value added (or net turnover) for each of these 10 single items – only a aggregated figure can be provided. It was also not possible to calculate the percentage weights of these 10 items.

Item 3 starts with the value added of 41.4 mio. EURO for the year 1996 and this value rose to 46.5 mio. EURO in the year 1999 and slightly decrease to 45.9 mio. EURO in the year 2000. On average counterfeit goods, sold in Austria had a value added of 44.4 mio. EURO over the years 1996-2000. The growth rates are again declining from 4.8% 1996-1997 to 3.5% 1997-1998 and a negative one from 1999-2000.

If we go on the last item (4), electronic, e-commerce, electronic security, again it is very difficult to trace back which part of the production is Austria based or has been used in Austria. As these items are mostly services, it is not clear whether fraud or counterfeit goods come in to Austria and are used here, or what the precise way of flow is within the European Common Market. Hence, these figures have to be interpreted with great care. They might be a first hint, what roughly takes place in Austria, but also a part of the value could be from Germany, Italy, or other EU-member-countries. The fraud, faked and counterfeit goods and services of item 4 (electronic, e-commerce, electronic security) has a value added of 58.2 mio. EURO in 1996 and this value rises to 67.4 mio. EURO in the year 2000. On average over 1996-2000 the value added is 63.3 mio. EURO. The growth rate again is declining from 5.3% from 1996-1997 to 4.2% from 1997-1998, and to 2.8% from 1998-1999. On average, the growth rate of fraud, faked and counterfeit goods and services of item 4 (electronic, e-

commerce and electronic security) was 3.7% over 1996-2000. If we add up these four items, we get an added value of the sum of fraud, faked and counterfeit goods and services of these four items of 154.6 mio. EURO in 1996 and this value increases to 179.2 mio. EURO in 2000. On average the value added of fraud, faked and counterfeit goods and services of these four items was 168.9 mio. EURO over the period 1996-2000. The growth rate is again decreasing. It was 5.7% from 1996-1997, 4.7% from 1997-1997, 3.2% 1998-1999 and 1.7% from 1999-2000.

The average growth rate of fraud, faked and counterfeit goods and services of these four items over the period 1996-2000 was 3.8% per year. Another problem with these figures is, that it is very difficult to estimate which part is really Austria based and which part not. As we have a free market within the European countries, it is almost impossible to trace back all these items to Austria. So these figures should also be interpreted with great care under the aspect that one bases them to the country Austria.

3. Some remarks of types of fraud and future areas of fraudulent activities and the cost of fraud

If one considers these four items, fraud can take place easily in all four areas. One might replace original products by faked or counterfeit ones or uses older ones, or one might sell them to higher prices, one might promise goods which do not keep the promise what they offer, etc. So fraud is a criminal activity with very many facettes and can take place in a lot of instances in these four areas.

Future areas of fraudulent activities will especially take place in the whole information and technology area, in the computer area, in the whole sector of e-

commerce and the whole area of luxury goods. Especially, in the e-commerce sector, where we have not very many save guards, it might easily be possible that these criminal activities will increase in future times. It is very difficult to estimate which will be the booming areas, but the whole computer business, electronic business, information technology business and luxury goods certainly will be among them!

To estimate **the cost of fraud, faked and counterfeit goods and services** again is extremely difficult. We have a clear cut cost situation for the single firm on a micro-economic basis, if a firm realizes that their products have been faked or counterfeit, then they loose money, because they sell less of their products and services and have a clear damage (profit loss). This can results in job losses and a decreased value added of this firm. This is true for all four areas which have been investigated in this short paper. For the overall economy, the story is a bit more difficult, because if people spend less on these four items, they can spend more or another items and whether this additional spending balances out the negative effects of the single firms is an open question. But in general, these costs are clearly visible and one should think about strategies how one can reduce the amount of fraud, faked and counterfeit goods and services.

Table 1: Value added of fraud, faked and counterfeit goods and services of four categories

Item		Values added of fraud, faked and counterfeit goods and services; in mio. EURO					
		1996	1997	1998	1999	2000	Average 1996-2000
1)	Food and Drink ¹⁾	21,6 (3,2%) ²⁾	22,3 (2,2%)	22,8 (1,3%)	23,1 (-1,7%)	22,7 ³⁾	22,5 (2,5%)
2)	Drugs illegal and medicines ⁴⁾	33,4 (9,0%)	36,4 (8,2%)	39,4 (4,6%)	41,2 (4,9%)	43,2 ³⁾	38,7 (6,7%)
3)	Counterfeit goods ⁵⁾	41,4 (4,8%)	43,4 (3,5%)	44,9 (3,6%)	46,5 (-1,3%)	45,9 ³⁾	44,4 (2,7%)
4)	Electronic, e-commerce, electronic security ⁶⁾	58,2 (5,3%)	61,3 (4,2%)	63,9 (2,8%)	65,7 (2,6%)	67,4 ³⁾	63,3 (3,7%)
Sum of items 1-4		154,6 (5,7%)	163,4 (4,7%)	71,0 (3,2%)	176,5 (1,7%)	179,2 ³⁾	168,9 (3,8%)

1) Mostly domestic (Austria based), however it is possible that already a part has been imported from other (EU-) countries.

2) In brackets () are the yearly growth rates.

3) Preliminary values.

4) The domestic part is difficult to estimate, up to 50% of the value added may be imported.

5) Mostly value added sold in Austria, i.e. the production mostly (2/3) took place abroad. The counterfeit goods and services are (1) Clothes (mostly expensive and/or designer clothes), (2) leather clothes (including shoes), (3) watches, (4) jewelery, (5) sports wear, (6) sports articles, (7) toys (model toys, electronic toys), (8) cameras (video, normal, digital), (9) entertainment products (radio, cd-players, etc.), and (10) perfumes and cosmetics.

6) Very difficult to trace back which part of the production is Austria based or has been used in Austria.

Source: Own calculations.