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**Reimbursement of VAT
on written-off Receivables**

by

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Reimbursement of VAT on written-off Receivables^a

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Abstract¹

In many OECD countries, a seller has a right to reimbursement of VAT (RVAT) she has paid on goods sold, but for which she has not yet received payment. Such reimbursement of VAT on receivables is economically inefficient. It leads to:

- Distortion of credit markets, by subsidizing direct credit at the cost of financial intermediaries.
- Price discrimination, by subsidizing buyers with low creditworthiness.
- A less efficient collection of bad debts, as trade with bad debts is made extremely expensive.

The finance literature presents several “good” arguments in favor of trade credits, e.g. transaction costs and asymmetric information. In contrast RVAT is an economically “bad” argument for trade credit. It is a subsidy that leads to inefficiently high use of trade credit.

¹ The authors thank Richard Sweeney for very useful comments and suggestions.

Reimbursement of VAT on written-off Receivables

In many OECD countries sellers have a right to reimbursement of the VAT (value added tax) they have paid on goods sold, that is on receivables, but for which they have not yet received payment on written-off receivables. In this article we argue that a right to reimbursement of VAT on written-off receivables (RVAT) is economically inefficient:

- RVAT distorts credit markets. Suppliers get a competitive advantage vis a vis financial institutions in providing loans.
- RVAT helps firms to price discriminate between buyers. Buyers of low creditworthiness – both private persons and firms – are subsidized.
- RVAT lowers, at least in some countries, the attractiveness of selling bad debt to more efficient debt collectors. This leads to a less efficient collection of bad debts.

The rest of the article is organized as follows: Section 1 presents the legal situation of RVAT. Section 2 refers arguments for existence of trade credits in a non-RVAT world. Section 3-5 analyses the distorting effects of RVAT as regards competitiveness of bank loan compared with trade credits, facilitating implementation of price discrimination as well as regards to reducing the efficiency of the market for risky debt. Section 6 discusses the argument that abolition of RVAT lower the attractiveness for employees to be entrepreneur. Section 7 concludes.

Reimbursement of VAT: The legal situation today

The economic importance of VAT in the OECD-area has increased over the last 25 years. VAT taxes² is now found in all OECD countries except US and they accounted for 18 per cent of total tax revenues and 60 per cent of consumption tax revenues in 2000, OECD (2002). Reimbursement of VAT means that a supplier who has sold a good subject to VAT and paid VAT on the sale, can receive refund of paid taxes if the buyer does not pay for the good in question. Although reimbursement of paid taxes on

² By VAT we mean general consumption taxes based on the value-added principle, that is also some Goods and Services Taxes (GST). Jørgensen and Owens (1995) describes value-added taxes compared with retail taxes: “.. under a VAT system tax is levied at each stage and can be reclaimed in the next link in the trading chain until the final consumer is reached; all traders are treated on an equal footing. In general, VAT thus has little or no distortionary economic effects. Under a tax on retail sales, by contrast, the end-user of a product or a service has to be identified, since that is the stage at which the tax has to be levied. Under a VAT system with tax being levied at each stage, it is of course in the trader’s own interest to reclaim it. In this way the tax will automatically be paid by the final consumer”. They argue that in theory and under ideal circumstances a VAT tax and a retail sales tax should be economic identical, but that VAT in fact often is considered to be more difficult to evade.

written-off receivables is not restricted to VAT, presumably, RVAT is one of the most important.

In Denmark, for example, the VAT is 20% of the price inclusive of VAT (or 25% of the price exclusive of VAT). Thus a supplier, who has sold a TV on credit at 1,000 euro, VAT included, can receive reimbursement of 200 euro VAT if the buyer does not pay for the TV.

The Danish RVAT is due to pure coincidence. RVAT exists because the VAT law originally as originally drafted gave firms a choice between settling VAT using the payment method or the invoice method. A free choice presumes reimbursement of VAT because a corporation that chooses the payment method “automatically” will have the right to reimbursement of VAT. If the customer does not pay for the delivered good no turnover will be registered according to the payment method, and consequently there will be no VAT to pay. When parliament decided to allow only the invoice method it apparently forgot to remove the right to reimburse VAT. Also, a “fairness” argument (“why should people pay taxes on income they haven’t received?”) could have played quite a large role.

Many other OECD countries operate with reimbursement of VAT as table 1 shows³. This is also the rule for Australia, which as the last but one OECD country introduced a federal VAT with effect from 1 July 2000. Outside the OECD area almost all the central and eastern European countries introduced VATs during the 1990s. For these countries RVAT is not the predominant rule. OECD (1998) reports⁴ that “Contrary to practice in EU countries, however, most Central and Eastern European VATs (except the Romanian VAT) do not have an allowance for bad debts” and this is not violated by a free choice of accounting basis as “In nearly all countries, the law prescribes the “invoice basis” of accounting”.

³ For the EU countries the relevant EU directive “Sixth Council Directive of 17 May 1977 on the harmonization of the laws of the Member States relating to turn-over taxes –Common system of value added taxes: uniform basis of assessment” states that it is up to the individual states to decide on whether or not to admit tax credits for VAT paid on written-off receivables. It says (article 7): “In the case of cancellation, refusal or total or partial nonpayment, or where the price is reduced after the supply takes place, the taxable amount shall be reduced accordingly under conditions which shall be determined by the Member States. However, in the case of total or partial non-payment, Member States may derogate from this rule.”

⁴ OECD (1998), p. 38 and p. 115. The OECD study cover Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia.

Table 1: VAT systems in selected OECD countries (2002)

Country	Introduction year	Duty rate (%)		Possibility of reimbursement
		Normal	Special	
Australia	2000	10.0		Yes
Austria	1973	20.0	10/12	Yes
Belgium	1969	21.0	0/1/6/12	Yes
Canada ^{a)}	1991	7.0	0	Yes
Denmark	1967	25.0	0	Yes
Finland	1964	22.0	0/8/17	Yes
France	1954	19.6	2.1/5.5	Yes
Germany	1968	16.0	7	Yes
Great Britain	1973	17.5	0/5	Yes
Greece	1987	18.0	4/8	No
Iceland	1989	24.5	14	Yes
Ireland	1972	21.0	0/4.3/10/12.5	Yes
Italy	1973	20.0	4/10	Yes
Luxembourg	1970	15.0	3/6/12	Yes
Netherlands	1969	19.0	0/6	Yes
New Zealand	1986	12.5		Yes
Norway	1970	24.0	12	Yes
Portugal	1986	19.0	5/12	Yes
Spain	1985	16.0	4/7	Yes
Sweden	1969	25.0	0/6/12	Yes
Switzerland	1995	7.6	2.4/3.6	Yes
Turkey	1985	18.0	1/8/26/40	No

^{a)} The federal component is 7.0%. In addition, for some provinces a provincial component of 8.0% applies.

Note 1: OECD (1995) and IBFD might differ on which year a VAT system was introduced. In these cases OECD (1995) applies.

Note 2: For some countries (e.g. Germany, Great Britain, Luxembourg, Netherlands and Norway) special rates apply to farmers, fishermen or forestry undertakings among others.

Sources: Australian Government (Australian Taxation Office). Canadian Department of Justice (Excise Tax Act). International Bureau of Fiscal Documentation (IBFD), Guides to European Taxation, Volume IV: Value Added Taxation in Europe (Binder *, **, *** and ****), Amsterdam, Updated version: 2002. OECD (1995, 2002). New Zealand Government (Inland Revenue).

US is the only OECD country without a federal VAT. The US sales tax is a state⁵ tax imposed on retail sales, some services and other items. Compared to VATs a difference is that the risk of loss of paid taxes on written-off receivables by and large is delimited to retailers. Reimbursement of sales taxes, however, gives the same incentives as RVAT. Most states operate with reimbursement, although exceptions exist⁶.

The literature of VAT mentions that neutrality of VAT to the financial sector among other features includes neutral treatment between banks and non-financial suppliers of trade credit⁷. The rest of this article discusses the distortionary effects of RVAT in relation to risky debt. We begin with a description of why imperfections in some cases might establish trade credits dominating bank loans as a market solution and then we discuss in which ways the RVAT distorts that outcome.

Why trade credit in a no-RVAT world?

RVAT is by definition only relevant when companies do not sell for cash, i.e. when they provide some kind of credit. Now it is obvious that cash payment is not possible, or at least not practical, in all circumstances. When a painter paints a flat or an office, delivery is continuous and unless cash is paid continuously, there will be some element of credit. For many companies, it is more appropriate to send out bills once a month rather than continuously. Even if bills are written every day, there is still some element of credit, as the bill has to be sent and the customer needs a couple of days to pay. Because payment does not take place when the item is handed over risk of non-payment is inevitable.

⁵ Because of local sales taxes the total tax rate might vary dependent on city and county.

⁶ For instance, The Texas Administrative Code, The Sales and Use Tax Regulations issued by The California State, Board of Equalization, The Indiana Administrative Code and The South Carolina Code of Laws allow a deduction for sales taxes paid on bad debts. On the other side The Pennsylvania Code does not permit “to take a sales tax credit for amounts representing bad debts or uncollectible accounts”.

⁷ For instance, Malcolm Gillis (1990) discuss VAT and Financial Services. As one of four principal features for neutral tax treatment of Financial Services under a VAT Gillis (1990) mentions: “Neutral treatment between firms that specialize in financial services (bank, insurance companies) and other firms that do not specialize in finance but that offer financial services as complements to their principal activities (trade credit offered by wholesale houses and manufacturers, factoring and leasing firms, and the like)”, p. 86.

One can easily overestimate the volume of “unavoidable” credit risk. It should be remembered that we are only interested in risky credit. An obvious way to avoid risky debt would be to let “risky” customers pay in advance⁸. Of course, this would in some cases lead to another kind of risk, as the seller also might default, but the point is that the total risk can be diminished. Furthermore, technological development increases the possibility of instant payment: when bills can be sent electronically and payment can be made the same way, the “unavoidable credit period” is shortened.

Therefore, much trade credit is voluntary; the seller has chosen not only to be a seller, but also to provide credit. Many companies give their customers the choice between cash payment (with a rebate for cash payment) or payment within a month. Some companies accept even longer credit periods, demanding interest for the credit. Sale on credit is also common in many consumer sales; cars, furniture, televisions etc. are sold on credit. In some of these cases the company is not the “real” creditor, however, but only a “middleman”. That is often the case with cars; the car sales company has an agreement with a finance company that gives the loan directly to the buyer. Nevertheless, many sellers are also providers of credit.

What determines whether credit from the seller or a loan from a financial intermediary is optimal? One might think that banks and other financial intermediaries have a comparative advantage in credit evaluation and debt collection and thus should dominate completely. As trade credit is widespread, however, this is apparently not the case. There might be several explanations as to why companies in some areas have a comparative advantage vis à vis banks:

- *Transaction costs*: It may be simpler to do everything in one transaction (sell and give credit) instead of the buyer having to go to two different places to make the transaction. A seller can stop supplies and, therefore, he has better opportunities than a bank has to force borrower to comply with credit terms. Also, some companies are very dependent on their supplier (a seller of the expensive TV brand B&O cannot change to selling other televisions if B&O stops delivering). A bank has only one – and rather drastic – way of enforcement, namely to declare the buyer bankrupt. Furthermore, “bankruptcy costs” typically are of such a huge size that banks often have no immediate advantage by a petition for bankruptcy.
- *Information*: Suppliers might have a comparative advantage with regards to *evaluation of creditworthiness*. Through sale to a certain type of customers (i.e.

⁸ Little information is available on the size of losses companies incur on their credit sales, but there is no doubt that the amounts are considerable.

garment shops) sellers build up an expertise in credit evaluation of this type of business. Knowledge about the specific market as well as about the customers is established through continuous business relationships over a long period. This asymmetric information in favor of the seller provides him with an advantage compared to the banks.

These explanations are “good” reasons for the existence of trade credits. As we will argue, however, there are also “bad” reasons, one of them being RVAT, another that supplier credit enhances the possibility of credit discrimination.

RVAT and trade credit

RVAT seems natural – and fair. The seller has not received his money. The authors of OECD (1998) stress the opinion, that “VAT should be collected only on the net consideration received by the seller” and “If a debt becomes irrecoverable, taxable persons should be allowed to claim an input tax credit for the tax included in the debt. Any part of the debt subsequently recovered should be included in taxable receipts”⁹. Why should a seller pay VAT on a sale where he hasn’t received payment? Would this not add insult to injury? Fairness is an elusive concept, however. Let us therefore instead concentrate on economic efficiency: a system without RVAT is more efficient than a system with RVAT.

The easiest way to understand the negative efficiency effects of RVAT is to look at the sale decision and the credit decision as two independent decisions.

There is no reason for the seller to provide credit to the borrower, except maybe for a very short time period for practical reasons, as mentioned above. An obvious alternative to sales on credit is for buyers to borrow from banks and other financial institutions. If a third party financed the purchase, the seller would pay VAT whether the buyer was able to repay the loan or not.

RVAT gives providers of trade credits an unfair advantage in lending, compared to financial intermediaries. This advantage increases with the risk of loss on the loan and with the maturity of the loan.

⁹ OECD (1998), p. 38 and p. 40. The foreword of the publication stresses that the views and opinions expressed are those of the author, which don’t necessarily represent those of the OECD or the European Commission, which is joint editor.

Rules differ between countries and can be rather complicated, depending on who the buyer is and how the sales price is defined (are interest payments separated out when selling on credit? etc). Problems become even more complicated when income tax is included. We concentrate on the RVAT problem. Let us analyse a situation where a household buys a television for 1000 euro, of which 200 euro is VAT. The purchaser has no money and needs a loan. The choice is between two types of loan:

- The seller grants the buyer credit
- A bank gives the buyer a loan

Let us assume that seller and bank have exactly the same expertise in judging credit risk and exactly the same costs, which for convenience are set equal to zero. Under these assumptions one would expect banks and sellers to be able to offer loans at exactly the same terms.

We make the following simplifying assumptions: The loan/credit is to be repaid in one year. The risk-free interest rate is 4%. The probability that the customer does not repay the loan is x , where x is a number between 0 and 1 ($x=0.10$ corresponds to 10% probability that the loan will not be repaid). The borrower is not charged any fixed fee, only interest. Both bank and seller are risk neutral. To grant such a loan a bank will require a minimum interest r , which can be calculated from the equation (1A). This interest rate r secures that the bank has a return of 4% after expected losses. More generally, equation (1B) specifies r as a function of the risk free interest rate r_{rf} and x .

$$(1A) \quad (1,000) \cdot (1+r) \cdot (1-x) = (1,000) \cdot (1+0.04) = 1,040$$

$$(1B) \quad r = \frac{r_{rf} + x}{1 - x}$$

Table 2 shows the minimum interest rate for the bank, depending of the size of the credit risk x . An increasing risk (x) leads to an increasing rate of interest. The example can easily be extended to take account of internal loan costs in the bank.

Table 2: Creditor's minimum interest rate etc. depending on risk of default

Risk of default	Bank		Supplier		Bank's additional interest rate
	Minimum interest rate	Expected rate of interest	Minimum interest rate	Expected rate of interest	
0%	4.00%	4.00%	4.00%	4.00%	0.00%
1%	5.05%	4.00%	4.85%	4.00%	0.20%
5%	9.47%	4.00%	8.42%	4.00%	1.05%
10%	15.56%	4.00%	13.33%	4.00%	2.22%

How does the calculation look if the seller of the television provides credit and he also requires an expected return of 4%? We assume that the credit does not increase the probability of sale. *The purpose is solely to analyse to what extent RVAT gives the seller an advantage compared to the bank as a creditor, independent of who is the best (most efficient) to grant credit.* The question is whether RVAT causes distortion between different suppliers of the same financial services.

A seller that grants a 1,000 euro credit would require an expected payment of 1,040 euro in one year. With an interest rate of r and a risk of default at x the expected payment of the credit in one year is calculated from (2A). The first part of the expression is the expected payment from the buyer and the second part is the expected VAT reimbursement. Equation (2B) is the more general specification of r .

$$(2A) \quad (1,000) \cdot (1+r) \cdot (1-x) + 200 \cdot x$$

$$(2B) \quad r = \frac{r_{rf} + 0.8 \cdot x}{1 - x}$$

Table 2 shows the interest rates required by the supplier and the bank. With the above assumptions the supplier's required interest rate will be 0.20 percentage points less than the bank's at a 1% risk of default, and 2.22 percentage points less at a 10% risk of default.

In other words, RVAT gives the supplier a competitive edge in giving credit. Without RVAT we would have a "level playing field". The reason for this result is obvious. If a customer borrows money in the bank, the state gets the VAT whether the customer pays or not. If, however, the customer gets credit from the seller, the state gets money only if the customer pays. If we look at buyers that are companies themselves, we get the same results.

We will not enter into a "fairness discussion". It is obvious that if a large part of all credit losses is due to "unavoidable credit", if it is difficult administratively to distinguish between avoidable and unavoidable credit, and if one thinks it is unfair that VAT should be paid on unavoidable losses, then one can argue for RVAT on all losses as a second best solution. Our impression is, however, that "unavoidable credit" is responsible for only a small part of all credit losses.

RVAT and price discrimination

What is price discrimination and in which cases is it wanted and unwanted respectively? This question is not as easy to answer as it may look. In general, both national

legislation and EU legislation discourage price discrimination. In some areas we want discrimination, however.

We don't want all borrowers to pay the same rate of interest, independent of bankruptcy risk. We would like high-risk borrowers to pay a higher rate of interest than low-risk borrowers. It is in the best interest of banks to let different borrowers pay different rates of interest that reflecting the different risks. The situation is otherwise in connection with trade credit, however. Here it is in general advantageous for companies to price discriminate in a way that favours high-risk debtors. This opportunity exists without RVAT but is increased by RVAT.

The possibility – and advantage - of price discrimination can be illustrated by a simple example. The possibility is largest in connection with goods with high profit margins, an extreme case is a credit sale of software with marginal production cost equal to zero.

Consider a company that sells a product for 100 euros cash. It also sells on credit. Consider then a situation with two potential customers. One is solvent, and the probability is 100% that he will pay. The other is insolvent and there is 50% probability that he will pay.

Both customers are offered the product for a cash price of 100, and both can buy the product with a 3 months credit period and with an annual rate of interest corresponding to a quarterly rate of interest of 1%. *Offering the same credit conditions to customers with widely different creditworthiness implies price discrimination between the two buyers.* The solvent buyer is offered a loan on market conditions. The other buyer is offered a loan at an interest rate far below the corresponding risk-adjusted market rate¹⁰. Under market conditions, a borrower with 50% probability of non-payment should pay a quarterly interest rate of 102% for a loan with a maturity of 3 months. Of course, a seller would never dream of offering a loan with an interest rate of 1% per quarter to a customer threatened by insolvency, if he considered the loan as a “stand-alone” project, i.e. *without bundling credit and sale of goods or services*. Therefore, a discount for the risky customer is implicit in the credit conditions.

This sort of price discrimination is difficult to identify, and it is even more difficult to complain about for the solvent customer. He cannot complain about not being offered the same terms as the other customers, because formally he is, both in price and in credit

¹⁰ This presumes the high-risk customer has a higher elasticity of demand.

terms. It is not easy to complain about the fact that another customer is *not* being charged a higher rate of interest. The credit terms should in principle depend on the customer's standing, but in practice that is a subjective matter of judgement. A complaint about price discrimination because of customers with lower solvency being offered credit on the same terms as oneself is hardly easy to win in court.

RVAT implies especially good possibilities for price discrimination for products with high contribution margins. Consider a corporation that sells a product at the standard price 100 euro, 25% VAT included. The corporation provides credit to buyers. To simplify the example, assume that the interest rate on risk-free loans is zero, which is not a bad approximation. Table 3 shows the connection between variable costs and the maximum risk of default the corporation can accept on credit sale with and without reimbursement of VAT.

Table 3: Connection between variable costs, reimbursement of VAT and maximum risk of default at selling price 100 euro (25% VAT included)

Variable costs (VAT excluded)	Maximum acceptable risk of default on credit sale (with reimbursement of VAT)	Maximum acceptable risk of default on credit sale (without reimbursement of VAT)	Difference
0	100%	80%	20%
20	75%	60%	15%
40	50%	40%	10%
60	25%	20%	5%
75	6.25%	5%	1.25%
80	0%	0%	0%

Consider the situation with reimbursement of VAT, where a supplier through the Internet sells software with zero marginal production costs. He can offer the product on credit to all buyers without credit evaluation. He will gain on all sales, even if the payment probability is close to zero. If there is a positive payment probability, the seller will have a positive expected profit. He will get 80% of the revenue paid, and the "VAT authorities" get 20%.

If there is no access to reimbursement of VAT, the situation will be somewhat different. Seller must now pay VAT at 20 euro for each unit sold, no matter whether the customers pay or not. The VAT authorities will consider the sale as one transaction and

the credit that follows as another transaction¹¹. Hence with no access to reimbursement of VAT, the supplier only sells on credit if there is at least a 20% probability that the customer will pay.

If the variable costs are 60 euros (VAT excluded), the seller provides credit only if the customer has more than a 75% probability of payment in the situation with reimbursement of VAT. Because with a 75% probability of payment his expected revenue is 75 euro (VAT included) and 60 euro (net of VAT) for a credit sale at 100 euros (VAT included). Without RVAT he would require a more than 80% probability of payment.

For products with high profit margins we observe significant differences as to the "pain limit" for default, with regard to probability, dependent of RVAT or not. For products with very small contribution margins the question of reimbursement of VAT does not make any considerable difference with regard to the maximum acceptable level of credit risk.

RVAT and the market for risky debt

Monitoring of receivables is complicated, involving both legal and economic aspects. One issue is how to collect bad debts, including in particular the long time follow-up on debtors who later "recover". This is not a core competence for the typical firm, which may often lead a creditor to sell a risky debt before it is due at a discount or to sell bad debts at a fair but low price to corporations specialized in debt collecting¹².

In Denmark, and probably several other countries, the fact that a manufacturer, wholesaler or retailer sells claims without recourse below face value did not entitle her to RVAT and the third person is prevented, also, from reimbursement. Furthermore, the rules are constructed in such a way that if a corporation sells bad debt, on which it has been reimbursed for VAT already, the total refund must be paid back and not, as one would have expected, only the reimbursement corresponding to the received amount .

Conversely, for both cases The State of California Sales and Use Tax Regulations are very different from the Danish rules. If a retailer sells written-off receivables to a third person she must include the received amount in her next tax return. As regards risky

¹¹ We are aware that the seller of course has tax deductibility for the amounts he has lost on giving credit, but it does not change our calculation.

¹² It should be noted that in practice selling bad debts is especially relevant for debts of private persons. Typically corporate debt is lost through bankruptcy proceedings.

receivables created on retail sales on which no part is charged off for sales tax purposes a change of the regulation took effect as from 2002. For retail sales invoiced from 2000 a third person acquiring such assets without recourse directly from the retailer might later be entitled to a refund for accounts which are not collected. This is an exception from the principal rule that “a purchaser of receivables cannot claim a bad debt deduction or refund for accounts which are not collected”.

Contrary to the much more neutral rules of California the Danish RVAT regulation distorts both the market for not-due risky receivables as well as the efficiency of bad debt collection.

The Danish market for risky not-due debt is distorted in the way that RVAT establishes a wedge between the value of the claim for the retailer and for the third person which works as an incentive for the retailer to bear more credit risk than otherwise preferred¹³.

If claims are categorized as bad debts they can typically be sold at a price which amounts to only a few percent of face value, because collection is difficult and a great part of the debts will never be collected. The Danish RVAT is an impediment for transmitting of the bad debt to efficient collectors. A supplier, for instance, reimbursed for the VAT of a debt at 100 euro, will lose money, if the debt is being sold at a price below 20 euro¹⁴. Assume a 25% VAT tax rate. First, if the supplier writes-off receivables at 100 euro she receives a RVAT of 20 euro. Subsequently, if she sells the written-off receivable the sale provokes, independently of the market value, repayment of all 20 euro. The outcome is that RVAT eliminates the market for bad debts depreciated to less than 20% of face value.

To keep the record straight we note that the buyer of the debt of course have no right to RVAT of debt purchased this way, if the debt is not paid. It is exclusively the original

¹³ The Australian Goods and Services Tax Ruling distorts the market for non-due risky receivables in the same way as the Danish regulation. Division 21 and Division 136 of “GST Act” set out requirements for adjustments for bad debts. GSTR 2000/2 explains the requirements and paragraph 47 says: “If you assign the debt to another party, the provisions of Division 21 cannot operate. Under Division 21 only the entity that makes the supply can make the adjustment for any bad debt relating to that supply. For example, if a debt is assigned, the assignee has no entitlement to a bad debt adjustment under Division 21”. On the other side, different to Danish rules but like California Sales and Use Tax Regulations the “GST Act” appears not to lower the efficiency of debt collecting.

¹⁴ For instance, the Danish VAT Instruction section G.1.6.3, “Losses on assigned debt” says about selling debt: “A possible VAT regulation for losses made by the corporation before the assignment, e.g. temporary regulation on basis of trustee in a bankruptcy estate or regulation in connection with depreciation of debt on basis of a specific assessment, therefore must be fully reimbursed when disposing the debt to a third party”.

creditor who has the right to RVAT. Thus there is a further argument against the existing right to RVAT: It prevents trade in bad debts and implies that some debtors are not being forced to pay to the extent they would have been otherwise. The importance of this argument might be marginal. First of all we are speaking of relatively limited amounts that can be collected at all. Second, the debtor concerned will often be in a situation where a more active debt collection from one creditor mainly leads to a less efficient debt collection from other creditors. Typically the customers concerned are in debt to many different creditors. Third, the deterrent effect of a continuous follow-up on defaults is for some creditors so valuable that it more than compensates for a negative net outcome of the follow-up itself.

RVAT and new entrepreneurs

One often meets the argument that there are too few entrepreneurs and that one should make it easier for wage earners to start their own businesses. It is easy to see that abolition of RVAT could be a problem for new entrepreneurs in two ways:

- It would make it more difficult for them to buy goods and services on credit. Abolition of RVAT increases the costs for a seller on credit if he is not being paid, and new companies notoriously have a higher bankruptcy risk than existing companies.
- New companies might have a more liberal credit policy to buyers as a way of penetrating a market, as this is less “aggressive” than lowering prices.

There is little reason to believe, however, that too few wage earners are trying to become entrepreneurs. As a matter of fact, there is as much reason to believe that too many people try to become entrepreneurs.

As often pointed out (for Danish empirical evidence see Møller, Nielsen and Poulsen (1998)), small and financially risky firms are to a very large extent financed by trade credit and by public credit. When such firms go bankrupt the public sector often suffers losses because income taxes for the employees and VAT have not been paid. That is, the government pays twice when these corporations go bankrupt. First, it does not get its VAT and income taxes from the firms concerned. Second, as a result of reimbursement of VAT, it carries 20% of the losses suffered by suppliers of the corporation in question.

For competing businesses it would be an advantage if the establishment of these high-risk ventures was not so subsidized. Less public credit to corporations through

shortening of the credit time for VAT and income taxes is one way ahead. Another is a total removal of VAT reimbursement. To this one could add that due to “animal spirit” there is a general tendency for would-be-entrepreneurs to overestimate their opportunities and consequently the probability of success.

Studies in behavioural economics show that people in general overestimate their own ability (cf. the fact that a very large part of all drivers feel more safe if they steer a car themselves instead of being a passenger with somebody else). The tendency to overestimation of own abilities is an argument for dissuading people to become entrepreneurs exactly as it is an argument for lowering the demand for lotteries by means of taxes. Another aspect is that wage-earners becoming entrepreneurs often profit from training and ideas obtained from their former employer; the larger the probability is that wage-earners leave their job to become entrepreneurs, the less incentive there is for an employer to invest in education for employees.

Of course one can find several arguments for the opposite point of view, that is that it would be socially efficient with more entrepreneurs. Our point is that the answer is so uncertain that there is absolutely no reason to put any weight on the argument that an abolition of RVAT would lead to fewer entrepreneurs.

Summary and conclusion

In most countries corporations selling on credit have access to the RVAT, which means that if buyer does not pay, the seller will get the VAT (or sales tax) paid in connection with the sale in question reimbursed. This may seem natural.

Especially “small craftsmen”, who often give short-term credit but principally work on a cash payment basis, no doubt will find a removal of RVAT unreasonable. This does not change the fact that RVAT from an economic perspective is inefficient. There are two basic problems with reimbursement of VAT:

- *RVAT leads to a distortion of competition, which favors trade credit rather than credit through financial intermediaries.* Simply put, for sellers of products subject to 25% VAT, who have access to VAT reimbursement, the state carries 20% of the loss on bad debtors through the VAT. This distortion is of course biggest for credits with a high percentage of loss. I.e. it is important for credit risk profiles like credit card credit to private customers and for sales to corporations with a high probability of bankruptcy like maybe pizzerias, garment shops and similar kind of businesses. On the other hand, it hardly plays any notable role in connection e.g. with plumbing for private customers, where the percentage of loss is estimated to be low. The effect

RVAT has on terms of competition should not be overrated. Consider for instance an estimate of the average losses on credit card credit of 5% yearly; reimbursement of VAT implies that the shops all else equal can offer loans at a yearly interest rate 1 percentage point below what the banks can offer. But as the interest rate on such loans is often about 20%, we are hardly speaking of a decisive factor of competition. RVAT is just one factor among many others.

- *RVAT intensifies an unwanted possibility of price discrimination.* Sellers of goods with a high contribution margin may wish to give credit on terms that do not cover the risk of default, because the credit could work as a means to implement an otherwise impossible price discrimination. This possibility also exists without reimbursement of VAT, RVAT increases the possibility.
- *RVAT might make it easier for people to start a business on their own.* However, there is no reason to believe that this is an advantage for society.

Finally, it should be mentioned that according to Danish rules, RVAT demands documentation. For private customers there must be a letter from a lawyer and, for firms in bankruptcy there must be a statement from a trustee about the size of dividend and so on. It is unclear whether removal of RVAT generates an administrative relief for the firms, or whether the requirements for RVAT are completely identical to the requirements set up to deduct losses from taxable income. In the first case there is also an administrative argument for abolishing RVAT.

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