This note deals with two remaining issues relating to the previous discussion of the treatment of employee stock options (ESOs) in the national accounts.

1. **Stock options used to purchase goods and services**

During the late-1990s and early-2000s it was observed that some companies, notably small fast-growing companies in high-tech sectors, were overcoming cash-flow constraints by paying their suppliers of goods and services with options on their company stock. These options had similar general characteristics to employee stock options (vesting periods, strike prices etc). It should be noted that use of these types of transactions appears to have declined significantly since the early-2000s.

The national accounts treatment of these types of stock options is undoubtedly more straightforward than for employee stock options – here there is no doubt that the purchase of goods and services should be recorded as a cost for the company. The same logic has been followed in business accounting under IFRS 2 “Share-based payments”.

However it is important to underline that with stock options purchasing goods and services there is a choice of the method of valuation to be made for the transaction in the national accounts (which would either be intermediate consumption, increase in inventories or acquisition of a fixed asset depending on the nature and use of the product). One possibility is to use the estimated value of the options themselves at the time of purchase (as for employee stock options). Another possibility is to use the estimated value of the goods or services, based on the value of similar goods and services (or perhaps on an invoice issued by the supplier). In business accounting the second possibility may be used provided that a good estimate may be obtained, otherwise the first possibility should be used.

Within the national accounts it is therefore proposed that the stock options issued in respect of the purchase of goods and services should be recorded as financial instruments (Other accounts receivable payable), but not in a separate category (as for employee stock options). This is because the transactions in goods and services paid for with stock options should be preferably recorded at the value of the goods and services received, which in most cases will be a reliable measure. It will ensure that whatever the method of payment, goods and services acquired by companies in the national accounts should in principle be valued in the same way.

Comment by the editor: This seems to complete a loophole on the treatment of the use of stock options as a form of payment. Stating that the preferred valuation is the value of the goods and services received and only when this is not available should the same sort of valuation be used as for ESOs is in keeping with IAS rules and with SNA principles.

2. **Employee share plans**

In addition to employee stock options, there are a number of other models by which employees can be encouraged to purchase, or rewarded by, shares or changes in share prices
in the companies for which they work. The terminology does not seem to be fully standardised worldwide. IFRS 2 covers all of these plans with the common principles used for employee stock options. However it is important to stress that these plans are very different from employee stock options and each one might be treated differently in the SNA.

a) "Employee Share/Stock Ownership Plans": these are in effect retirement plans where a company contributes its shares (whether existing or newly issued) to the plans for the benefit of the company's employees. This contribution of shares may be arranged by the company by direct transfer of shares, transfer of cash used to buy the shares, or the plan taking out a loan to buy the shares (which is repaid by the company). Employees' rights within the scheme grow over their period of employment\(^1\) and are then taken out when the employee retires or leaves the company before retirement.

These plans should be seen in SNA as company pension plans and treated accordingly - given their design, it is likely that the plans would be seen as autonomous and "fully-funded", and therefore classified in the Financial Corporations sector. Contributions of shares or cash by the employer to the plans would be recorded as employer's actual social contributions, with withdrawals of shares by employees recorded as payment of social benefits. In the case where the employer pays off a loan taken by a plan, the service payments on the loan could also be recorded as employer's social contributions (though there may be another option to fully restate transactions on an actuarial basis).

b) "Employee Share/Stock Purchase Plans": these plans give employees the opportunity (but not the obligation) to buy shares in their companies at a significant discount to the prevailing market price. After stock purchase, employees can usually sell the share immediately or hold onto them in the expectation of dividends and holding gains.

These plans should be seen in SNA as providing employees with an immediate benefit (compensation of employees – a type of bonus) when the shares are purchased at discount. The value of the benefit should be exactly equal to the discount obtained.

c) "Share/Share appreciation rights": these plans provide employees with a benefit (usually cash) relating to changes in the price of their company's shares, but without any issue of share (i.e. they are purely synthetic).

These plans should also be seen in SNA as providing employees with an immediate benefit (compensation of employees – a type of bonus) when the benefit is payable – this will usually be when the cash is paid.

Comments by the editor: The proposed revision to the treatment of (private) pension entitlements, which is to record the entitlement regardless of the level of funding, implies that the 1993 SNA injunction that if a firm invests a pension fund in its own stock it is to be regarded as unfunded becomes moot. Thus the IAS proposals here should be adopted in the SNA.

\(^1\) Sometimes, confusingly, the term "vest" is used here – it does not have the same meaning as for employee stock options.