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File Reference No. 1820-100 Exposure Draft:  
Revenue from Contracts with Customers

Dear FASB:

In general, I like having a single revenue recognition model. Since it is intended to cover such a broad range of transactions, the guidance is necessarily complex and I admit to initial confusion over certain points. My approach was to read the “standard” paragraphs followed immediately by the related implementation guidance. I eventually found it necessary to “crunch the numbers” and make journal entries to make sure I understood the intent behind the examples. This has been a lengthy process and, as usual, I have approached it as a teacher: How could I explain the standards and the examples to my students? As part of the process, I have identified examples areas that need improvement or correction and I hope the time I’ve spent will help contribute to a better and more useful final standard.

Note that I have comments that didn’t specifically fit into the questions posed to respondents. This discussion is located at the end of the letter, after the 18 questions. Appendices provide additional examples that I hope are relevant.

- Changes to glossary
- Corrections or clarifications needed for specific examples
- Paragraphs that would benefit from editing for clarity

For purposes of classifying comment letters, my title is professor of accounting and I am employed at the University of Idaho. I have held my CPA license since 1977. Prior to beginning

my 28-year academic career, I held a variety of positions including staff accountant in a small public accounting firm, controller for several small to medium-size business entities, and as director of finance for a large not-for-profit entity. As an active donor and small investor, I have occasion to read the financial information of charities and publicly-traded companies.

### Recognition of revenue (paragraphs 8–33)

**Question 1:** Paragraphs 12–19 propose a principle (price interdependence) to help an entity determine whether to:

- (a) combine two or more contracts and account for them as a single contract;
- (b) segment a single contract and account for it as two or more contracts; and
- (c) account for a contract modification as a separate contract or as part of the original contract

Do you agree with that principle? If not, what principle would you recommend, and why, for determining whether (a) to combine or segment contracts and (b) to account for a contract modification as a separate contract?

The guidance on price interdependence seems reasonably clear. In working through the examples in the exposure draft (ED), I came up with a number of questions related to implementation. I do not believe the transition will be easy. At least in the short-term, we probably need some sort of “revenue recognition implementation group” like the DIG. I do not believe the implementation guidance goes far enough with respect to certain industries known for trying to recognize revenue too early (the sale of timeshare condominiums comes to mind).

**Modification of contract.** In actually “trying out” the accounting for the various examples in the implementation guide, I came upon situations where I was not certain whether a change in estimate was equivalent to the modification of a contract. In particular, Example 2 & 25 discusses a pretty complex computation regarding the value assigned to a coupon that a customer receives in conjunction with a purchase. In my version, I assumed that 1000 units were sold so that I could explore “what happens” if actual is different than predicted. I observed that future changes in the average amount purchased per customer in the subsequent period would have no effect on the performance obligation because it is tied merely to a predicted value per coupon. Therefore, if a different number of coupons are used (as compared to the expected utilization rate), the performance obligation could end up with a debit or credit balance when the coupons expire. However, the original estimate was based on future purchases averaging \$50. If it turns out that customers are spending \$60 on average, the value to the customer has changed because the coupon is more valuable to them than predicted. Is this a “change in the previously agreed pricing” and therefore a modification of the contract? I don’t think that is the intent so maybe it would help to add something to paragraphs 17-19 to clarify that a change in the estimates used to allocate the transaction price to the performance obligations is not necessarily(?) a modification of the contract.

In the following table, I’ve summarized my “findings” from working with Example 25. In Column 1, the vendor debits \$13.39 to the performance obligation each time a coupon is used (with a credit to sales). If the utilization rate is 90% instead of 80%, more coupons than expected are submitted which gives a \$1,339 debit balance in the performance obligation account when the coupons expire. In Column 2, the coupons are revalued using the new estimate of average sales (\$60 instead of \$50) and the new utilization estimate. An adjusting credit is made to the performance obligation with a debit to promotion expense. As coupons are used, they are recognized at \$16.20 each which exactly zeros out the revised balance in the performance

obligation account. The third column would be to simply ignore actual experience and move the balance in the performance obligation account to sales at the date the coupons expire. The problem with the “easy method” is that it ignores actual utilization and could therefore hide intentional under- or over-estimations.

Scenario 2 – coupon utilization and average sales are higher than anticipated  
(A Summary of Appendix F Version of Examples 5 & 25)

	1	2	3
Sales during period of coupon usage	No modification. Close Debit Balance in Performance Obligation to Promotion Expense	Treat as Modification of Contract using better estimates (or actual)	The Easy Way: Ignore Actual Experience
Sales revenue	116,454	118,980	115,114
Cost of goods sold	53,600	53,600	53,600
Promotion expense	1,339	3,866	0
Profit recognized on sales	61,515	61,514	61,514
Net profit margin	52.8% of sales	52.8% of sales	53.8% of sales

Note that there is no difference in net income – actual utilization rate has no effect at all. However, the result of ignoring “abnormal losses” (or at least unexpected losses) is a noticeable decline in reported sales revenue for the following period. Given the particular facts in my expanded version of the solution, the decline would be 3.4% (as compared to the “best” answer in Column 2) – perhaps enough to distort trend analysis. Since sales revenue is an important and closely watched figure for many financial statement users, I do not believe the Boards should simply ignore the issue of how erroneous estimates are treated – even though the bottom-line is eventually the same.

Another comment on Example 25: I found the example fairly hard to implement because it implies the value of the coupon is \$10.71 but in actual fact the value of the coupon for recognition purposes is \$13.39. For 1,000 customers, the performance obligation is \$10,714 divided by 800 customers. As each customer uses a coupon, the performance obligation must be reduced by \$13.39 or it simply doesn’t “work out right.” [Please see Appendix F.] It would perhaps help to add to the bottom of Example 25 a sentence like this. “Assuming multiple units are sold, each coupon would result in a debit to the performance obligation account in the amount of \$13.39 (\$10.71 divided by the 80% expected utilization rate).” This additional sentence would make it more obvious to preparers that the performance obligation may not automatically zero itself out. As a case in point I noticed that the slides in a KPMG webcast made the same erroneous statement regarding what amount would be charged to the performance obligation upon coupon usage – so I’m not the only person who was confused by the example!

**Question 2:** The Boards propose that an entity should identify the performance obligations to be accounted for separately on the basis of whether the promised good or service is **distinct**. Paragraph 23 proposes a principle for determining when a good or service is distinct. Do you agree with that principle? If not, what principle would you specify for identifying separate performance obligations and why?

I agree in principle. The concept is fine and the ED has a reasonable approach but I find myself still getting the “distinct good or service” concept confused with the concept of separable

performance obligations and independent versus interdependent prices. I'm sure we'll all get used to the new language but there will be a steep learning curve.

**Question 3:** Do you think that the proposed guidance in paragraphs 25–31 and related implementation guidance are sufficient for determining when control of a promised good or service has been transferred to a customer? If not, why? What additional guidance would you propose and why?

This part seems pretty good to me. However, I assume there have been a lot of “troublesome” if not fraudulent revenue recognition practices which led to many of our existing US GAAP pronouncements. I am not sure the Boards’ have sufficiently “covered all the bases” that could permit or encourage new abuses. The biggest specific concern that comes to mind is for “big ticket items” like sales of real estate. As I recall, “full accrual” recognition of profit at the point of sale was quite common for things like time-share vacation condominiums. Some of the properties sold had not yet completed the promised amenities. There was also the issue of very small or nonexistent down payments that made the likelihood of customer performance (payment of loan) fairly low. A good illustration of what would be appropriate under the new standards would be helpful for a couple of reasons. First, the Boards would have a chance to consider the pitfalls before there is a problem. Second, compliance as intended would be enhanced.

In general, it seems like a good idea to have at least one example that deals with each type of transaction for which separate guidance was considered appropriate in the past. You have a lot of them already: franchises, sales with right of return, sales with repurchase option, etc. so the additional examples would not be terribly burdensome to prepare.

### Measurement of revenue (paragraphs 34–53)

**Question 4:** The Boards propose that if the amount of consideration is variable, an entity should recognize revenue from satisfying a performance obligation only if the transaction price can be reasonably estimated. Paragraph 38 proposes criteria that an entity should meet to be able to reasonably estimate the transaction price. Do you agree that an entity should recognize revenue on the basis of an estimated transaction price? If so, do you agree with the proposed criteria in paragraph 38? If not, what approach do you suggest for recognizing revenue when the transaction price is variable and why?

I do not care for the way the ED describes a “variable transaction price” because it is confusing. In reality, the transaction price is generally a fixed monetary amount. Just about the only ED examples that truly have a variable transaction price would be 18 and 19 (management fee with indexed component and performance bonus). Otherwise, the “variable” part of the consideration is really just the allocation of a fixed transaction amount to components like the right of the customer to return a (good or defective) product or the benefit from a customer loyalty program. So why do I find myself getting confused? A customer loyalty program is a separate performance obligation. However, the right of return of *good* products (right of return Example 3) is not a performance obligation at all but the possible return of *defective* products is a performance obligation (just not a separate performance obligation) per Example 4. To add to the confusion, the implementation guide discusses asset accounts that may or may not be “contract assets.” Both Examples 3 & 4 show an asset for the right to recover products from customers (either good or defective) that is probably NOT a contract asset even though they are clearly related to the contract. Maybe the problem is with the “contract asset” terminology and it should be something more explicit like “Unearned Contract Consideration” or “Unbilled Revenue.”

I imagine I'm not the only confused person around – I think the Boards need to help us out, else practice will not be very consistent. As I worked through the examples and wrote my initial response to Questions 10-12 on presentation, I was assuming that a number of accounts would be netted on the balance sheet because I had the impression that a single contract could have both contract assets as well as performance obligations. I was prepared to net construction in progress against the performance obligation for balance sheet reporting (like current practice that nets inventory and progress billings accounts). I was also thinking we would net the right to receive assets back from the customer with the obligation to accept returned products (defective or salable). Apparently, “there can be only one” (like in the Highlander series ☺) – a contract asset OR a contract liability. That is probably the point of Example 29 (which I didn't see on the first couple of readings).

In other words, I was not clear on the difference between contract assets and performance obligations and other contract- related asset or liability accounts or typical contra-asset accounts to provide for credit losses, prompt payment discounts, etc. Clearly, the bad debt allowance is a holdback as is the customer's right to return product for a full refund (which could be due to a non-performance obligation warranty or just because of the terms of the original sale). The more I work through the examples, the more I think I'm beginning to really comprehend the difference – but it is still confusing and just when I think I have it straight, I find myself questioning my previous conclusion! For example, an allowance for credit losses and/or prompt payment discounts would be deducted from accounts receivable. Neither of these is a performance obligation. However, Example 3 has a “refund liability” that is apparently reported under current liabilities when it would make more sense to treat it as another allowance against accounts receivable! Otherwise accounts receivable will be too high, based on actual expectations. The Example 3 liability is NOT a performance obligation but the almost identical obligation to let people return products in Example 4 IS a performance obligation. I was hoping that (potential) treatment as an allowance against the receivable would be a way to tell a “variable transaction” from one with a separate performance obligation. Apparently not.

Paragraph 36 lists a whole slew items that have rather different effects. Some are performance obligations and others are not. Clearly, we allocate revenues to performance obligations. But we also allocate the transaction price to other things that are not performance obligations. Performance obligations are fairly clear: customer loyalty programs, rebates and coupons have a negative effect on future sales that will be partially ameliorated by the recognition of the liability as partially offsetting revenues (Examples 25 and 26) in later time periods. In contrast, some of the items listed are merely revenue that will NEVER be reported (product returns that are credited to the customers' accounts, bad debt losses, prompt payment discounts taken by customers, etc.) It would be very helpful if the Boards could distinguish between these transaction types.

In addition, it may be appropriate to use an allowance account against the receivable (instead of a liability account) to recognize items that are not expected to ever result in revenues. That would make the distinction easier to understand. Case in point: Sales with a right of return are probably not “real” and a refund is anticipated (Example 3). Therefore, this account should reduce receivables rather than appear in liabilities with a title that could be confused with a performance obligation to replace a defective unit at no cost to the customer (Example 4). I've

posted some “comparative methods” examples at my website that could be helpful in illuminating this point. See Example C and D in particular (although the comparison between A, B and C is also telling).

While there are a number of contract-related liabilities that are not performance obligations, I think the contract-related assets that are not “contract assets” are possibly more confusing. I initially presumed that the “strange new accounts” were “contract assets” if they carried a debit balance and “contract liabilities” if they carried a credit balance. I provide the following lists that might be useful to others similarly confused. (See Appendix G.) I foresee a considerable education problem to get financial statement users up-to-speed. It will be interesting to see if, as a practical matter, companies continue to record sales at invoice amount with contra-revenue accounts on the income statement for an “allowance for product returns” or contra-cost-of-goods-sold accounts to reflect the cost of the expected returns. That might actually be a better and more transparent treatment for these “variable transaction price” components. The original estimate would then be a bit more obvious and any abnormal returns or the like would be in expense rather than in the section that computes “net revenue from sales.”

**Question 5:** Paragraph 43 proposes that the transaction price should reflect the customer’s credit risk if its effects on the transaction price can be reasonably estimated. Do you agree that the customer’s credit risk should affect *how much* revenue an entity recognizes when it satisfies a performance obligation rather than *whether* the entity recognizes revenue? If not, why?

To tell the truth, I don’t see an important distinction between reducing reported revenue instead of increasing bad debt expense. The Board’s position, however, seems to be consistent with the approach described in the recent financial instrument exposure draft (and I wrote a lot about the problems with the model as applied to recognition of interest revenue). The distinction between the financial instruments treatment (good or bad) and this ED is that when one loans money, there is no revenue recognized until the passage of time has earned interest (at least under the amortized cost approach). The impact is on the amounts of interest revenue reported in later periods. The underlying theory seems to be that it is not revenue unless we collect the cash. In other words, we are instituting an “accelerated cash basis” accounting approach. In contrast, the reduction of revenue for product and service sales on account is immediate. However, the actual economic loss is less than the full invoice amount by the profit margin that would generally exist.

In addition, financial instruments often involve lending money to be repaid over long periods of time while the contracts with customers covered in this exposure draft are generally (but not always) short-term. The goods and services are generally provided promptly and often the consideration is received at the same time (or soon after) that the customer takes delivery of the product or service. The Boards mention the possibility of making these credit risk assessments for individual customers as well as groups of customers. For many industries, credit risk assessment would most commonly be made on the basis of all receivables held (an aging analysis and the like) which suggests a periodic evaluation eased by the use of an allowance account. At the individual level, one should simply not sell to people who are expected to not pay for the goods and services. Since we don’t know which customer will fail to pay, it is sensible to initially assume the customer will pay. Just because someone has a low credit score does not mean that person or company will not pay the invoice when it comes due. Nonpublic

companies may deliberately choose to sell to folks with a lower credit score as part of their mission or because they know that enough of them will be good customers to make the extension of credit profitable. Vendors can certainly predict average defaults but they can't identify dead beats in advance.

The risk to the vendor is extending credit to riskier customers that may have a higher default rate but there is a good business reason for extending credit: if one does not offer credit, sales might be lost entirely. If a particular customer is behind in making payments, the vendor can simply refuse to sell them anything else until they make the next payment. In addition, the vendor loses the COST of the service rather than the full invoice amount. So the risk seems to me to be considerably less than the credit risk that comes with loaning money. I think that banks and other financial institutions should be far more careful in extending credit than most small businesses. Nonpublic entities may not bother to check credit scores because they know the individual. In summary, extending credit for goods and services is different than loaning money. What is important in one setting may not be worth the trouble in the other.

There is nothing particularly bothersome about this "new" approach and I expect it would be a less disruptive change for sales of goods and services than I found it for measurement of amortized cost of loans. However, I'm not convinced that having less revenue instead of higher revenue offset by "bad debt expense" is a particularly useful change in GAAP, particularly if it will be troublesome and costly to implement. Accordingly, I would like to argue in favor of the "old method" which would mean that credit losses would be separately estimated rather than part of determining the transaction price. I think this would be easier and there is no "bottom-line" difference.

In addition, it is possible that the usefulness of the reported revenue may be reduced for industries which make both cash and credit sales – one will not be able to divide total sales by the (average) unit cost to estimate out how many units were sold. Such information might be used in break-even analysis (although there are alternatives), or to compare "same store sales" from year to year. While we rarely see "single product" companies, I often see discussions of unit sales or at least "same store sales" of the companies in which I invest. "Sales" is just not going to mean quite the same thing under this ED as it currently means. So I think we could "do without" this particular aspect of the revenue recognition approach to figuring out the transaction price!

In short, I would prefer that you let us continue to record sales equal to the debit to cash or accounts receivable – with a corresponding charge to bad debt expense and the allowance account as appropriate. The more I think about the ED approach (which is already used in a number of industries?), the more that I'm worried that companies will have an incentive to UNDERESTIMATE credit losses so that they can report a higher level of sales. Perhaps others can determine whether such a bias is detectable in industries that already use this "net sales" approach?

[My apologies for being too wordy with the above – didn't have time for more editing.]

A related comment: **Example 20 is not very helpful.** First, it is highly unlikely that one can make probability assessments for individual contracts so an example about the sale of 100 units (or the like) would make more sense. Second, we need to record accounts receivable at the invoice amount, not the “less than invoice amount” specified by the example. Third, I’m having a hard time understanding the Boards’ intent with respect to revenue recognition when estimated transaction prices are incorrect (as will almost always be the case!). Is there ever a situation when we should increase revenues because it was a bad estimate in the first place and more customers paid than we originally anticipated? In this situation, we would have an unnecessary credit balance in the allowance for doubtful accounts. Is it the intent that only experience that is WORSE than originally expected would cause us to record bad debt expense (to get rid of the erroneous debit balance in the allowance for doubtful accounts? That seems to be the implication in Example 20. Please see the expanded version of Example 20 as well Example B [both on my website].

**Question 6:** Paragraphs 44 and 45 propose that an entity should adjust the amount of promised consideration to reflect the time value of money if the contract includes a material financing component (whether explicit or implicit). Do you agree? If not, why?

Upon first reading, this makes perfect sense. However, when I worked through the examples in the implementation guidance section, it became clear that identifying a “financing component” may be tricky and lead to unexpected consequences. Example 21 and 22 seem fine. However, when I worked the two scenarios in Example 2 that begins at IG3, I was very puzzled as to why time-value-of-money considerations were ignored. In these scenarios, the customer makes a substantial payment to extend a contract in the third (final) year of the original contract. The two scenarios are trying to explain the difference in accounting when prices are interdependent versus not interdependent. In comparison, Example 22 has a company receiving payment one year in advance of delivery of a product. In Example 2, the company receives payment for three years of future services which will not be delivered until those future years. I can’t see why the first is a situation where the time value of money must be taken into consideration while the second shows no such adjustments to revenue. So, of course, I added some assumptions to see what Example 2 would look like if handled like Example 22. This is a more complicated situation since services are delivered continually over time. To simplify, I assumed 12% per annum as the amount the customer would charge the vendor for a loan. I then assumed that revenue would be recognized monthly. The \$240,000 prepayment works out to revenue of \$7,971 per month ( $n=36$ ,  $i=1\%$ , ordinary annuity). I then made journal entries for the monthly interest expense in summary annual entries to look at the effect. (See Appendix C). The effect is to report an increasing amount of net income over the 3-year extension of the contract. This approach has “flat” revenue recognition but decreasing amounts of interest expense as the amount of the prepayment declines monthly. Please examine carefully. Is this what FASB and IASB intend to impose on almost all maintenance/service contracts sold?

In my experience MOST maintenance or service contracts that have been offered to me cover 2-3 years and I’ve been asked to pay the full cost of the extended warranty at the point of sale. I don’t know how companies are currently treating the receipts – are they grossing up the amounts of revenue reported in the future – maybe some sort of deferred annuity approach? If not, are you SURE you want to get rid of the ASU 835-30-15-3 of “customary trade terms” notion? I suspect the issue has not arisen given that we’ve accounted for the original maintenance

obligations at the point of sale and as an estimated liability. Now we will also need to handle the prepayment as a financing arrangement in many cases! What I don't like about my solution to Example 2 is that one is recording "interest expense" that will NEVER be paid. Won't that mess up all the "times interest earned" ratios that are currently in use? At a minimum, turning most service contracts into financing arrangements will be complicated (and more guidance is important!). On the positive side, I think it is representationally faithful and automatically allows for increased net revenue to cover the future increases in the cost of providing services – without the complications (and errors) in ED Example 27 (IG88). Of course, there are no time-value-of-money implications in Example 27 because I presume the customer is paying monthly or annually throughout the contract. Still, the ED suggests that interest could be material even for SHORT contracts. That is why I believe that eliminating the notion of "usual and customary trade terms" is a bad idea. Let's avoid the cost associated with imposing complicated time-value of money computations on contracts that are only one-year long. Having that "less than a year until payment" notion somewhere in the standard seems like a decent idea and quite reasonable.

**Question 7:** Paragraph 50 proposes that an entity should allocate the transaction price to all separate performance obligations in a contract in proportion to the standalone selling price (estimated if necessary) of the good or service underlying each of those performance obligations. Do you agree? If not, when and why would that approach not be appropriate, and how should the transaction price be allocated in such cases?

The guidance on "distinct" performance obligations is the key element here. As long as we can figure out what is distinct and what is not, the allocation of the transaction price to the performance obligations should work okay – but only because performance obligations with a high level of uncertainty results in a deferral of revenue recognition (as per ED Example 24).

### Contract costs (paragraphs 57–63)

**Question 8:** Paragraph 57 proposes that if costs incurred in fulfilling a contract do not give rise to an asset eligible for recognition in accordance with other standards (for example, Topic 330 or IAS 2; Topic 360 or IAS 16; and Topic 985 on software or IAS 38, *Intangible Assets*), an entity should recognize an asset only if those costs meet specified criteria. Do you think that the proposed guidance on accounting for the costs of fulfilling a contract is operational and sufficient? If not, why?

It is probably okay although it is always annoying to have to refer to another part of the ASC to find the answer. A brief description with the link is probably the best you can do to make things easy to use. In other words, could you expand the list to include brief reminders of what Topic 330 or Topic 360 says – with links to exact sections we need to read?

**Question 9:** Paragraph 58 proposes the costs that relate directly to a contract for the purposes of (a) recognizing an asset for resources that the entity would use to satisfy performance obligations in a contract and (b) any additional liability recognized for an onerous performance obligation. Do you agree with the costs specified? If not, what costs would you include or exclude and why?

My problem is not with Paragraph 58 but with Paragraph 59 part c. I don't think the implementation guidance and examples are sufficient to explain just when and how "abnormal" things have to be before we should adjust our estimates of the transaction price. In particular, the return of defective products for replacement appears to have no bottom-line impact per Example 4. Many of the examples would benefit from at least a brief discussion of "what happens next" when more coupons (or defective products, etc.) are returned than we expected. See also lengthy comment on contract modifications under Question 1.

## Disclosure (paragraphs 69–83)

**Question 10:** The objective of the Boards' proposed disclosure requirements is to help users of financial statements understand the amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Do you think the proposed disclosure requirements will meet that objective? If not, why?

The goal seems worthwhile. There are minimal examples provided – balance sheet presentation is a little unclear. I imagine we'll have to wait and see what develops as companies implement this standard. A table like the one in Example 30 would be useful but maybe it should have the nature of the products or services instead or in addition to customer categories. My thought is that product sales are less of an issue as compared to sales of extended warranties. A company could have multiple year contracts as well as backlogs to deliver within a month or two and commingling would not be particularly helpful. However, it is hard to have much of an opinion as to whether the disclosures will meet my needs as a financial statement user until we get some "real disclosures" to look at. I do have some particular questions that you didn't specifically ask:

### *General questions on disclosure and presentation*

The issues discussed earlier about identifying "contract assets" and "performance obligations" makes me wonder if it is possible to have both at the same time under the same contract. Paragraph 64 and Example 29 imply that there can be only one or the other. If there could be both, we need guidance as to whether we should net contract assets and contract obligations related to the same contract. Another question in my mind is whether we should continue to net construction costs (in inventory) against the performance obligation for "completed contract method" projects. Under current US GAAP as well as IFRS, the construction-in-progress account is netted against partial billings (rather like a performance obligation) for presentation on the balance sheet as either a net current asset or a net current liability. In addition, we are not allowed to net across contracts. Is this guidance still relevant and important? If so, it should be added to the discussion or clearly forbidden. See also some thoughts on balance sheet and income statement presentation in Appendix G.

**Question 11:** The Boards propose that an entity should disclose the amount of its remaining performance obligations and the expected timing of their satisfaction for contracts with an original duration expected to exceed one year. Do you agree with that proposed disclosure requirement? If not, what, if any, information do you think an entity should disclose about its remaining performance obligations?

I think this may refer to Example 30 or something along those lines. The disclosure is relevant but I'm not sure the 1-2, 2-3, or >3 years is intended to be the required breakdowns – but that could become practice if folks follow the example too closely!

The reconciliation schedules required for contract assets and performance obligations raise the issue as to whether some of the other accounts in the various examples should also be disclosed in roll-forward display. For example, the rate at which units are returned under right of return provisions is important because it potentially ties up a lot of inventory and is therefore costly to the vendor. The replacement of defective units (which is a performance obligation) is important but will it be CLEAR that the delayed recognition of revenue is associated with shipping too many defective products rather than something more innocent and outside the control of management like usage of points in a customer loyalty program? Perhaps the roll-forward for certain "product return" situations should be coupled with parallel roll-forward disclosures to the

related miscellaneous asset accounts for expected returns (they seem to be carried at replacement cost or lower of cost or market). We need some way to evaluate the quality of estimations! Otherwise, companies will be more free to cook the books by shipping defective or unwanted products just before year-end to inflate current year sales and profits. The same issue would arise with the deliberate underestimation of coupon or rebate utilization by customers. Since a company could have both coupons and replacement of defective units issues (as well as other types of performance obligations that are less subject to abuse like service contracts allocated evenly over time, the roll-forward accounts should be segregated and not commingled.

**Question 12:** Do you agree that an entity should disaggregate revenue into the categories that best depict how the amount, timing, and uncertainty of revenue and cash flows are affected by economic factors? If not, why?

Again, this seems like a worthy goal and would provide very relevant information for financial statement users.

### Effective date and transition (paragraphs 84 and 85)

**Question 13:** Do you agree that an entity should apply the proposed guidance retrospectively (that is, as if the entity had always applied the proposed guidance to all contracts in existence during any reporting periods presented)? If not, why? Is there an alternative transition method that would preserve trend information about revenue but at a lower cost? If so, please explain the alternative and why you think it is better.

Prospective application is practical for preparers but not so good for financial statement users. At a minimum, I would prefer to see two comparative years using the same revenue recognition method with the cumulative change at the beginning of the year BEFORE the implementation date. In other words, if the standard becomes effective for years ending after Dec. 31, 2013, the income statement should show the “new and improved” figures for revenue for both 2013 and 2012 with the cumulative effect applied to retained earnings at December 31, 2011. Some companies report comparative data back for 10 years or more – I think it would be unreasonable to ask them to restate figures back that far. Accordingly, some sort of warning about lack of comparability/consistency should be required for historic displays.

This standard will require extensive changes in the accounting systems in some industries. In addition, there is a steep learning curve (at least that has been my experience) to get one’s mind around exactly how the changes will affect “what happens later” when estimates turn out to be different than expected, whether accounts are “contract assets” or just some other asset and which liabilities are “performance obligations” rather than just liabilities associated with a contract (The Example 3 “refund liability” is a case in point). These are preparer issues – users aren’t going to be able to clearly understand the impact of the changes until we see them in action. So having “one big change” date makes a lot of sense – implementing financial instruments, leases and revenue recognition simultaneously.

More importantly, we need lead time in education to begin teaching the next generation of accountants this new and more logical revenue recognition framework. It will take time for authors to get the changes into textbooks and then a learning curve for instructors and professors to come up with effective teaching strategies.

## Implementation guidance (paragraphs IG1-IG96)

**Question 14:** The proposed implementation guidance is intended to assist an entity in applying the principles in the proposed guidance. Do you think that the implementation guidance is sufficient to make the proposals operational? If not, what additional guidance do you suggest?

Not yet. I have an entire bullet-point list for of suggestions and corrections in later section. I also think implementation would be easier if the many glossary items listed for removal were instead modified to send folks to the “right place” or to an appropriate example in the implementation guidance. See comment under Questions 15 & 16 as well as the list of suggested improvements to specific examples that follows my responses to your 18 questions.

**Question 15:** The Boards propose that an entity should distinguish between the following types of product warranties: (a) a warranty that provides a customer with coverage for latent defects in the product. This does not give rise to a performance obligation but requires an evaluation of whether the entity has satisfied its performance obligation to transfer the product specified in the contract. (b) a warranty that provides a customer with coverage for faults that arise after the product is transferred to the customer. This gives rise to a performance obligation in addition to the performance obligation to transfer the product specified in the contract. Do you agree with the proposed distinction between the types of product warranties? Do you agree with the proposed accounting for each type of product warranty? If not, how do you think an entity should account for product warranties and why?

I think I read that this distinction was something folks wanted when they responded to the discussion paper. Frankly, I think it would be easier to understand if all warranties were treated as performance obligations. If the latent defect warranty only last 90 days, the performance obligation would disappear very soon after sale anyway. In fact, the similarities between good product returns (Example 3) and defective product returns (Example 4) probably caused me more confusion than necessary. If the ED goes forward with the distinction between two different types of warranties, then the glossary should have each kind defined. These definitions are currently not in ED Appendix A.

**Question 16:** The Boards propose the following if a license is not considered to be a sale of intellectual property: (a) if an entity grants a customer an exclusive license to use its intellectual property, it has a performance obligation to permit the use of its intellectual property and it satisfies that obligation over the term of the license; and (b) if an entity grants a customer a nonexclusive license to use its intellectual property, it has a performance obligation to transfer the license and it satisfies that obligation when the customer is able to use and benefit from the license. Do you agree that the pattern of revenue recognition should depend on whether the license is exclusive? Do you agree with the patterns of revenue recognition proposed by the Boards? Why or why not?

This part seems reasonable to me. However, I am no expert with franchise accounting and other issues regarding intellectual property that have led to aggressive early recognition of revenue in the past. In particular, I thought Example 8 was a bit skimpy in the details as to **when** revenue from each performance obligation would be recognized. But maybe that’s just me – I’d prefer an example with some numbers and allocations!

## Consequential amendments

**Question 17:** The Boards propose that in accounting for the gain or loss on the sale of some nonfinancial assets (for example, intangible assets and property, plant, and equipment), an entity should apply the recognition and measurement principles of the proposed revenue model. Do you agree? If not, why?

This intention was not clear to me from reading the scope paragraph 6 (always hard to see what is not there!) I have not had time to go through the tremendously long list of “other” contracts in

ED Appendix B. A picture is worth a thousand words and an example has so many advantages over just expecting people to get on the right track by noticing what is NOT listed as scope exceptions! How about providing some examples where part of the contract is the sale of land or a copyright along with other products and services. The only examples I recall that is along these lines are Example 10 and maybe Example 17. I've mentioned elsewhere that real estate transactions are a missing piece in the implementation guidance and that a construction accounting example with more meat (e.g., journal entries) would help. For good compliance, you should probably have a few examples about advertising costs that were, in the past, capitalized. This is such a complicated set of changes to existing industry practices – I hope folks with industry-specific knowledge are responding with any problems they envision!

In my particular area of expertise, I would like to see an example or two on research grants and contracts – long a troublesome area for not-for-profit entities. Is a contract a gift that is mostly a nonreciprocal transfer or is it a quid pro quo exchange transaction for services to be provided? Can a government grant comprise both donor restrictions and separate performance obligations with amounts allocated to each? I know that multi-year grants and contracts have generally been treated as “continuously delivered” by colleges and universities but I haven't any first-hand experience to offer on how it should all work under the new revenue recognition guidelines.

### Nonpublic entities

**Question 18:** Should any of the proposed guidance be different for nonpublic entities (private companies and not-for-profit organizations)? If so, which requirement(s) and why?

I can't think a reason to exclude nonpublic or not-for-profit industries from this general approach to revenue recognition. As practice develops, there could be a different level of required disclosures. For example, I already think it is pretty silly to require credit rating disclosures for mission-related loans to poor people or college students! The object may be to make loans to people who don't have good enough credit scores to get commercial loans. But this comment is related to another ED!

### Specific Suggestions for Implementation Guidance Examples (paragraphs IG1-IG96)

- You really need an example for a construction contracts that have journal entries. I've tried to come up with one that is similar to Example 15. Please see **Appendix A**. If this is NOT the accounting you intended, you will have a really good reason to improve the examples provided! Also see comments under Question 3 and 17 regarding other useful examples that should be added to the implementation guidance. My own struggle to come up with “titles” for construction accounts is another case in point for why there should be a more explicit example in the ASC.
- There is an ERROR in Example 27 that should be fixed. Please see **Appendix B**. I believe the last paragraph in the “solution” to the example is not correct because it makes no sense and creates a situation where a normal 23% profit margin is recognized the first year, then a 40% profit margin is recognized for the second year and the final year has ZERO profit left to recognize. The error lies in erroneously assuming that a number from

the “expected value” computation is the same as the number that should be used for accounting purposes. Technically, the “expected value” must be multiplied by the original number of contracts or units – and that seems very strange. It is better to compute total dollar amounts for each period and then divide by the expected number of units or contracts in each period. An alternate computation is provided in my “correction” for Example 26. Obviously, this is a complicated issue and affects the answers in several other examples as well. It definitely took me awhile to figure out how to make things “work.” Therefore, I strongly recommend that at least one example in the implementation guidance show how to convert from “expected” to “accounting” numbers. See also comments regarding your Examples 5 & 25) as well as Example 26.

- Example 5 and 25 is confusing – see my expanded version in **Appendix F** and my comment under Question 1 regarding recommended wording to add to the bottom of the example. That would be, however, a minimal fix and I think it would be better to change the example to one where 100 or 1,000 units were being sold (instead of just one) so that it is more obvious that the charge to the performance obligation is NOT \$10.71 for each coupon submitted.
- Example 26 has the same flaw as Example 25. There is the same confusion about the amount allocated per point (\$0.8676) versus the accounting value of a point used (\$0.9132). Unless this corrected amount is used, the performance obligation will not “work out to zero” even if points are used exactly as expected. The solution finessed this point by using a proration ( $4500/9500 * \$8,676$  instead of  $4500 \text{ points} * \$0.9132$ ). When the expectations change in the latter part of the example, the new value assigned to each point is \$0.8944. I think the examples will be more useful if a correct “per unit” amount to recognize as revenue is included. Some customer loyalty programs permit accumulations to be used at quite distant points in time. Presumably, the value assigned to each point or unit will vary. I would expect some sort of average value will have to be applied to reduce the accumulating performance obligation from multiple ticket or product sales. Arguably, the proportional method shown in the example would be harder to apply in those circumstances. Showing the computation both ways would probably be a good idea! If there are questions, see Excel version of Example 26 posted at my website.
- It is not clear from the examples that a “financing arrangement” should include prepayments for services to be provided more than a year later. The way I read Example 2, the renewal is a lump sum pre-payment and, if so, the solution should show a time-value-of-money impact. Please see my **Appendix C** for an expanded version that applies the Example 22 approach to Example 2 and comments under **Question 6** above. [I may have interpreted the Example incorrectly, but the issue is important anyway – interest expense for a “continuously delivered” service contract is much more challenging than a contract for delivery of a discrete product at a single point in time and probably warrants an example.
- Example 4 may have unintended consequences because it fails to explicitly show what happens when defective products in excess of expectations are received under a warranty that is not considered a performance obligation. This is a problem primarily for manufacturers since wholesalers and distributors could return defective products they received for refund or replacement too. Please see **Appendix D** and my comments to **Question 4** above. Recommended change to GAAP: defective units returned for

replacement under a product warranty that is not considered a separate performance obligation should have a “new basis” (replacement cost less estimated cost to repair). All other inventory valuations would continue to use the lower-of-cost-or-market approach currently in Topic 330. If this is not feasible, we definitely need an example to show or explain what “abnormal losses” constitute in this setting.

- After a lot of work making up and comparing examples (in particular, see the “multiple style” Examples A through D at the website), I have reached the conclusion that for sales with a right of return, **an allowance for returns** (instead of the “refund liability” shown in ED Example 3 is the better approach. Accounts receivable are overstated with respect to the actual amount expected of consideration that will be forthcoming from customers. With an allowance account against receivables, this overstatement is corrected. While the bottom-line is the same, reporting higher receivables and a liability (that is not a performance obligation) is less transparent than reporting net receivables without a liability account. Note that the product returns “undo” the sales (and Example 3 is fine on that point) and either cash or the receivable will be reduced by the returns. The very similar situation in Example 4 for the return of defective units could also be handled quite easily with an allowance for returns account (contra-receivable). However, the economic situation is different. The full consideration will be forthcoming when the defective units are replaced. Therefore, accounts receivable is not over-stated. In addition, it is probably important to have all performance obligations reported as liabilities. I have created two essentially identical examples that compare three possible bookkeeping styles. Example C is for the return of good products and Example D is for the return of defective units that will be scrapped. Each example also shows how over and under estimations of returns could be recorded. Excessive returns should result in an expense or abnormal loss account while future than expected returns could be recognized as other revenue (good product returns) or sales (defective product returns). You can also compare these journal entry styles to very similar examples for prompt payment discounts (Example A) and credit losses (Example B).
- I believe guidance would be useful on what to do when estimates are not exactly right (but not bad enough to require a modification of transaction price). I have done my best (after lots of experimentation) to come up with some rules of thumb that might be helpful in common situations. Please see **Appendix E**.
- Example 20 needs work because it is unlikely that companies will handle accounts receivable net of the MANY things discussed in the ED that reduce revenue and it is also unlikely that we’d really be able to assign credit risks to individual customers in any routine manner. Showing the receivable at \$900 instead of \$1000 would really confuse the person responsible for calling the customer about why they haven’t paid Invoice XXX yet. Think about also knocking down the receivable by prompt payment discounts or expected product returns! Communications with customers would be severely impaired. According to the latest Kieso intermediate accounting text, most companies record prompt payment discounts using the gross method (rather than the net method). It makes more sense to have separate allowance accounts to reduce the receivable (in total) but maintain the actual customer records at the invoiced amounts. Remember, the invoiced amount often include shipping which is not revenue to the vendor either. See also comments under **Question 5** above as well as my proposed rules of thumb in

**Appendix E.** In addition, my Examples A and B (at website) have comparative journal entry methods for prompt payment discounts and bad debts.

- Example 14 identifies a contract-related asset and a contract-related liability. Under my current reasoning, the “right to receive asset” is a “contract asset” because consideration has been received but there is no unconditional right to keep it (but I could be wrong). However, I don’t think the “repurchase liability” is a performance obligation. It would help a lot to clarify whether either of the amounts is what the Boards consider a contract asset or a performance obligation! Suggest notation for Example 14: “Note that the “repurchase liability” is/(is not) a performance obligation and the “right to receive asset” is/(is not) a contract asset as those terms are defined in the ASC.” An explanation as to why would be nice too.
- Example 29 clarification – is it possible to have both a contract asset and a performance obligation for the same customer contract? That’s what Example 14 looks like. If so, should they be netted? If there can never be both, please say so! Obviously, it would also help to clarify Example 14.
- I assume that slotting fees buy product placement services for a period of time. If so, the \$1,000 of revenue in Example 23 would be “continuously earned” over that period of time. That point is not mentioned and neither does it say whether it is only the net revenue of \$400 that should be recognized as time passes.

## Passages with Confusing Language

**Paragraphs 17-19.** Later sections of the ED use the wording “variable transaction price” and requires allocations of fixed amounts based on standalone pricing. It is possible that some of the standalone prices were estimated and estimated incorrectly. An allocation process is required to determine the “transaction price” applied to each component (some of which are performance obligations and some of which are other liabilities (related to product returns) or allowances for credit losses. Accordingly, the “agreed pricing” in the contract becomes interdependent between the various components to which the consideration is allocated. A bad estimate of one element gives bad estimates to all of the other components. Accordingly, I’m not sure if a really bad estimate could be considered a “contract modification.” Should you add something in this section to clarify that the “pricing” discussed here has nothing (or something) to do with paragraphs 35-42 where we learn about how to determine the transaction price.

**Paragraph 37.** If a customer has already paid, we are told to book a “refund liability” and that makes perfect sense. However, as a practical matter, we can have the same obligation to customers that have not yet paid which could be efficiently handled in an allowance for refunds account. The obligation to refund money is equivalent to saying the customer does not pay for the products (which is what happens with credit losses). I don’t like having to create a separate accounting mechanism for returns expected from customers who have paid and another accounting mechanism for returns expected from customers who have not yet paid. If all sales are “cash only,” one would obviously use a liability account for expected refunds. If most sales are “on account,” I think accounts receivable is over-stated unless an allowance account approach is used. In summary, the directives in Paragraph 37 may be just a little too specific!

**Paragraph 38.** The way I read the paragraph, we can't recognize any revenue at all from a fixed transaction price contract if one of the performance obligations cannot be estimated. The important part of the paragraph is the criteria for justifying the use of estimates – it is the introduction that is confusing. After all, you are asking us to allocate a fixed amount to two or more components. Therefore, the measurement of one component automatically affects the other components. If one element is unreliable, the other elements are also unreliable! From the implementation guidance, it appears that what is really meant is something like the following: **If a performance obligation cannot be reliably estimated given the criteria in paragraph 38, it should be recognized as a liability at the maximum possible amount. This will reduce the transaction price allocated to any other performance obligations.** Accordingly, there needs to be some “wordsmithing” in Paragraph 38 to clarify the meaning. Perhaps, strike the first sentence and add something like the bold passage to the bottom of the paragraph.

**Paragraph 43.** The last sentence is very confusing. Perhaps it should read: “...the effects of changes in the assessment of credit risk associated with that right to consideration shall be recognized as other operating income or expense rather than as revenue.” (Most of us think of revenue as income so it just sounds contradictory!) My change would clarify that it is still an “operating” section item. I also suggest that it is possible that credit losses could be severely over-estimated. In this unlikely event, an increase in the amounts allocated to performance obligations were erroneous and a correcting adjustment to revenue might be appropriate

For all the “vague” assets and liabilities mentioned in the examples, it would really help identify them as being or not being a contract asset or a performance obligation. Example 3, Example 4, Example 14,

### *Comments on Proposed Changes to Glossary*

I think it would be a good idea to CHANGE the glossary definitions instead of removing them too soon. For example, affinity programs still exist and the ASC user could be told that they may be separated performance obligations under ASC xxx-xx. Another example would be “slotting fees” which could send the ASC user to Example 23. In at least the short term, the glossary entry for “uncollectibility” could remind the ASC user that the new terminology is credit losses (?) with an appropriate reference. The installment method of accounting still exists and the glossary could inform readers that this is a tax method only with perhaps some reference to time-value-of-money issues in contracts with customers. We will still have a distinction between “completed contract method” versus “percentage-of-completion method” for construction and manufacturing. The glossary should inform the ASC user that this terminology no longer indicates a specific set of standards and refer them to the revenue recognition guidance or replacement terminology regarding “continuous delivery” criteria. There are many more instances I could name – I think the transition process would be much easier if the glossary could direct us (with hints to new treatment if possible) to the new section of the ASC and/or specific implementation guidance! Removal of terminology without reference to “new” treatment will create problems.

As mentioned earlier, I also think there may be some missing items from the list in Appendix A. I think it would be helpful to have the distinction between the two types of warranties: one gives rise to a separate performance obligation and the other does not.

## Closing remarks

In re-reading certain passages of the ED as I finalize this comment letter, I find myself wondering (again) if I really understood things as well as I thought. There are a lot of pages and I'm sure I missed things. Nevertheless, I hope that the hours and hours of time I've spent on the ED have not been a total waste. I hope my detailed "working out" of the examples is useful to the staff and leads to improvements and clarity in the final implementation guidance.

The appendices are not in any particular order – merely created as I encountered what seemed to be confusing issues. I also have created other examples which are only available at my website <http://www.cbe.uidaho.edu/tgordon/>. The Excel files used to create the appendices are also located there, if questions arise regarding my assumptions and computations.

Sincerely,

*Teresa P Gordon*

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### Attached:

Appendix A – Construction Accounting Example Based on ED Example 15

Appendix B – Correction of Apparent Error in ED Example 27

Appendix C – When does a "financing arrangement" exist?

A consideration of ED Example 2 as compared with Example 22 (Customer Payment in Advance)

Appendix D, Unintended Consequences of Proposed Handling of Product Warranty that Is Not a Performance Obligation – Example 4

Appendix E – Three Possible Rules of Thumb for Inevitable Errors in Estimating Utilization, Returns, Costs and Other Factors involved in Allocation of Transaction Price to Components of Contracts with Customers.  
Includes expanded version of ED Example 24

Appendix F – Variation of Examples 5 & 25 on Issue of Change in Estimate versus Contract Modification

Appendix G – A list of Account Titles with Notations Regarding Status as Performance Obligations or Contract Assets and Other Presentation Issues

Excel files mentioned are posted on my webpage at <http://www.cbe.uidaho.edu/tgordon>

## Appendix A – Construction Accounting Example Based on ED Example 15

Additional assumptions made: The first progress payment of \$60,000 is made at the inception of the contract. The second is made when the project is 40% complete and the third is made when the project is 80% complete. The final payment is held until customer acceptance at completion. As with ED Example 11, there is a single performance obligation. The original estimated costs include \$100,000 in materials and \$90,000 in other costs. Given the contract for \$240,000, the projected profit is \$50,000. By the end of the project the costs are higher than anticipated and the actual profit is \$44,000. I’ve attempted to apply “textbook” accounting procedures for construction accounting. The major variation is that with percentage of completion (continuous delivery) it makes sense to remove the construction costs from the construction in progress inventory account as revenues are recognized. For the completed contract approach (no revenue recognized until completion), the performance obligation account works rather like the “partial billings” or “construction billings” account. Under current GAAP, the construction in progress account and the performance obligation would be netted. This treatment is not clear under the ED because construction in progress is not exactly a “contract asset” but I’ve assumed netting would be appropriate.

An exploration based on Example 15 - long-term construction accounting							
Scenario 1 - customer obtains control throughout construction							
Scenario 2 - customer obtains control only at completion							
				Scenario 1		Scenario 2	
				Debit	Credit	Debit	Credit
<b>At inception of contract</b>							
	Cash			60,000		60,000	
	Performance obligation - progress billings				60,000		60,000
<b>Cost during first phase to reach the 40% completion milestone</b>							
	Construction in progress			77,000		77,000	
50%	Raw materials inventory				50,000		50,000
30%	Wages payable, A/P, cash, etc.				27,000		27,000
	Accounts receivable			60,000		60,000	
	Performance obligation - progress billings				60,000		60,000
	Cash			60,000		60,000	
	Accounts receivable				60,000		60,000
40%	Recognize contract revenue during period						
	Construction costs			77,000			
	Construction in progress				77,000		
240,000	Construction revenue				96,000		
	Performance obligation			96,000			
				430,000	430,000	257,000	257,000
	Gross profit reported in net income during period				\$ 19,000		\$ -
<i>See t-accounts below</i>				<b>Balance sheet presentation</b>			
				24,000	credit	120,000	credit
				-	debit	77,000	debit
				24,000		43,000	

**Question for FASB & IASB – are construction costs in this situation a “contract asset” that should be netted for presentation in the balance sheet?**

T. Gordon Comments on 1820-100

Appendix A, continued

				Scenario 1		Scenario 2	
<b>Cost during second phase to reach the 80% completion milestone</b>				Debit	Credit	Debit	Credit
	Construction in progress			67,000		67,000	
40%	Raw materials inventory				40,000		40,000
30%	Wages payable, A/P, cash, etc.				27,000		27,000
	Accounts receivable			60,000		60,000	
	Performance obligation - progress billings				60,000		60,000
	Cash			60,000		60,000	
	Accounts receivable				60,000		60,000
80%	Recognize contract revenue during period						
	Construction costs			67,000			
	Construction in progress				67,000		
240,000	Construction revenue				96,000		
	Performance obligation			96,000			
	<i>Earned portion =</i>		<i>192,000</i>				
	<i>Already recognized =</i>		<i>(96,000)</i>				
				350,000	350,000	187,000	187,000
	Gross profit reported in net income during period				\$ 29,000		\$ -
	<b>Balance sheet presentation</b>						
<i>See t-accounts below</i>	Contract asset/Performance obligation			12,000	debit	180,000	credit
	Less construction costs			-		144,000	debit
	Net current asset			12,000	debit	36,000	credit
<b>Entries during FINAL phase to complete contract</b>				Debit	Credit	Debit	Credit
	Construction in progress			52,000		52,000	
	Raw materials inventory	8,000			8,000		8,000
	Wages payable, A/P, cash, etc.	44,000			44,000		44,000
	Accounts receivable			60,000		60,000	
	Performance obligation - progress billings				60,000		60,000
	Cash			60,000		60,000	
	Accounts receivable				60,000		60,000
100%	Recognize contract revenue during period						
	Construction costs			52,000		196,000	
	Construction in progress				52,000		196,000
240,000	Construction revenue				48,000		240,000
	Performance obligation			48,000		240,000	
	<i>Earned portion =</i>		<i>240,000</i>				
	<i>Already recognized =</i>		<i>(192,000)</i>				
				272,000	272,000	608,000	608,000
	Gross profit reported in net income during period				\$ (4,000)		\$ 44,000
	Cumulative gross profit reported				\$ 44,000		\$ 44,000

Appendix A, continued

Again, the question is should “inventory” for long-term contracts be considered a contract asset to be presented net of performance obligations on the balance sheet? This is current practice for long-term contracts but the “proper” treatment under the new revenue recognition guidelines is not entirely clear. Perhaps, the Boards do not intend for the “netting” shown above for Scenario 2. It is also an assumption that there would be no inventory account at all if the contract is one that is continuously delivered to the customer.

Scenario 1 - continuous delivery Construction in progress			Scenario 2 - delivery at completion Construction in progress		
77,000		77,000	77,000		77,000
	77,000	-		-	77,000
67,000		67,000	67,000		144,000
	67,000	-		-	144,000
52,000		52,000	52,000		196,000
	52,000	-		196,000	-
		-			-
		-			-
196,000	196,000		196,000	196,000	
Scenario 1 - continuous delivery Net Performance Obligation			Scenario 2 - delivery at completion Performance Obligation		
	60,000	(60,000)		60,000	(60,000)
	60,000	(120,000)		60,000	(120,000)
96,000		(24,000)	-		(120,000)
	60,000	(84,000)		60,000	(180,000)
96,000		12,000	-		(180,000)
	60,000	(48,000)		60,000	(240,000)
48,000		-	240,000		-
		-			-
240,000	240,000		240,000	240,000	

Excel version is available on my website: **Example 15 construction contracts.xlsx**



T. Gordon Comments on 1820-100

Appendix B, continued  
 Corrections to Example 27

			Example 27 solution		Corrected Solution	
Beginning of second year - contracts renewed =			Debit	Credit	Debit	Credit
	Cash	90	90,000		90,000	
	Revenue - maintenance contracts	\$ 975		112,014		87,734
	Performance obligation	87,734	22,014			2,266
Erroneous computations from ED :						
	Total cash so far	190,000				
	Cumulative revenue so far	77,986				
	Revenue for current period	112,014				
During the second year (assuming cost are as expected)						
	Expenses (salaries, parts, etc)	\$ 750	67,500		67,500	
	Cash, etc. contracts =	90		67,500		67,500
			179,514	179,514	157,500	157,500
	Gross profit on income statement		44,514	40%	20,234	23%
<b>Balance sheet presentation (current liability)</b>						
	Performance obligation		-		24,281	
			Example 27 solution		Corrected Solution	
Beginning of third year - contracts renewed			Debit	Credit	Debit	Credit
	Cash	81	81,000		81,000	
	Revenue - maintenance contracts	\$ 1,300		81,000		105,281
	Performance obligation - maintenance co	105,281	-		24,281	
Erroneous computations per ED:						
	Total cash so far	271,000				
	Cumulative revenue so far	190,000				
	Revenue for current period	81,000				
During the third year (assuming cost are as expected)						
	Expenses (salaries, parts, etc)	\$ 1,000	81,000		81,000	
	Cash, etc. Contracts =	81		81,000		81,000
			162,000	162,000	186,281	186,281
	Gross profit on income statement		-	0%	24,281	23%
	Cumulative profit recognized		62,500	23%	62,500	23%
In accordance with ED solution			In accordance with CORRECTED solution			
Performance obligation			Performance obligation			
		22,014	-22,014		22,014	-22,014
	22,014	0	0	0	2,266	-24,281
	0	0	0	24,281		0
		0	0			0

Excel file is available on my website: **Ex27 with correction and variations.xlsx**

## Appendix C – When does a “financing arrangement” exist? A consideration of ED Example 2 as compared with Example 22 (Customer Payment in Advance)

In Example 2 (IG3), the customer prepays for a continuation of the contract. The example is intended to describe how one decides if a contract modification has interdependent or independent pricing. However, in both scenarios, the customer makes a large payment in the third (final) year of the original contract to obtain continued services in the fourth, fifth and sixth years. Accordingly, it seems that the customer has made a payment significantly in advance of the delivery of services and this would properly impose the recognition of interest expense. Here is a comparison of the ED solution with my own that makes the following additional assumptions: The rate at which this customer would loan money to this vendor is 12% per annum simple interest or 1% per month (given presumed recognition of revenue on a monthly basis). The \$240,000 prepayment works out to constant revenue stream of \$7,971 per month ( $p_v=240,000$ ,  $n=36$ ,  $i=1\%$ ,  $f_v=0$ , ordinary annuity). I assumed that there would be no time-value-of-money adjustment during the third year since that contract was less than 12 months from receipt of payment to end of the originally contracted service period. To make the example more meaningful, I added some cost assumptions similar to those in Example 27 but I did not allocate revenue based on expected costs. The assumed expenses and costs are \$50,000 for the first year and increase \$5,000 per year.

Period	Month	Interest expense	Implied fee for service	Performance obligation	Interest per year
		1%		240,000	
1	1/1/04	2,400	7,971	234,429	
2	2/1/04	2,344	7,971	228,801	
3	3/1/04	2,288	7,971	223,118	
4	4/1/04	2,231	7,971	217,378	
5	5/1/04	2,174	7,971	211,580	
6	6/1/04	2,116	7,971	205,724	
7	7/1/04	2,057	7,971	199,810	
8	8/1/04	1,998	7,971	193,837	
9	9/1/04	1,938	7,971	187,804	
10	10/1/04	1,878	7,971	181,710	
11	11/1/04	1,817	7,971	175,556	
12	12/1/04	1,756	7,971	169,340	24,997
13	1/1/05	1,693	7,971	163,062	
14	2/1/05	1,631	7,971	156,721	
15	3/1/05	1,567	7,971	150,317	
16	4/1/05	1,503	7,971	143,849	
17	5/1/05	1,438	7,971	137,316	
18	6/1/05	1,373	7,971	130,718	
19	7/1/05	1,307	7,971	124,053	
20	8/1/05	1,241	7,971	117,323	
21	9/1/05	1,173	7,971	110,524	
22	10/1/05	1,105	7,971	103,658	
23	11/1/05	1,037	7,971	96,723	
24	12/1/05	967	7,971	89,719	16,036
25	1/1/06	897	7,971	82,645	
26	2/1/06	826	7,971	75,500	
27	3/1/06	755	7,971	68,283	
28	4/1/06	683	7,971	60,995	
29	5/1/06	610	7,971	53,633	
30	6/1/06	536	7,971	46,198	
31	7/1/06	462	7,971	38,689	
32	8/1/06	387	7,971	31,104	
33	9/1/06	311	7,971	23,444	
34	10/1/06	234	7,971	15,707	
35	11/1/06	157	7,971	7,893	
36	12/1/06	79	7,971	0	5,938
		46,972	286,972		46,972

T. Gordon Comments on 1820-100

Appendix C, continued

Example 2 with time-value-of-money and other cost entries added

<b>Scenario 1:</b>						
Provider determines that the prices of old and new contracts are NOT interdependent						
			With Time Value of Money		Solution per ED Example 2	
			Debit	Credit	Debit	Credit
Year 1	Cash		100,000		100,000	
	Revenue -contract	spread over 12 mos		100,000		100,000
	8,333	per mo				
	Expenses		50,000		50,000	
	Cash			50,000		50,000
		<b>Gross profit</b>	<b>50,000</b>	<b>50%</b>	<b>50,000</b>	<b>50%</b>
Year 2	Cash		100,000		100,000	
	Revenue -contract	spread over 12 mos		100,000		100,000
	Expenses		55,000		55,000	
	Cash			55,000		55,000
		<b>Gross profit</b>	<b>45,000</b>	<b>45%</b>	<b>45,000</b>	<b>45%</b>
Year 3	Cash		100,000		100,000	
	Revenue -contract	spread over 12 mos		80,000		80,000
	Performance obligation			20,000		20,000
	Expenses		60,000		60,000	
	Cash			60,000		60,000
Year 3	Cash		220,000		220,000	
	Performance obligation			220,000		220,000
		<b>Gross profit</b>	<b>20,000</b>	<b>25%</b>	<b>20,000</b>	<b>25%</b>
		<b>Cumulative gross profit to date</b>	<b>115,000</b>	<b>41%</b>	<b>115,000</b>	<b>41%</b>
Year 4	Performance obligation		70,660		80,000	
	Revenue - contract			95,657		80,000
	Interest expense		24,997			
	7,971	<i>per month, see amortization table for interest</i>				
	Expenses		65,000		65,000	
	Cash			65,000		65,000
		<b>Gross profit</b>	<b>5,660</b>	<b>6%</b>	<b>15,000</b>	<b>19%</b>
Year 5	Performance obligation		79,621		80,000	
	Revenue - contract			95,657		80,000
	Interest expense		16,036			
	7,971	<i>per month, see amortization table for interest</i>				
	Expenses		70,000		70,000	
	Cash			70,000		70,000
		<b>Gross profit</b>	<b>9,621</b>	<b>10%</b>	<b>10,000</b>	<b>13%</b>
Year 6	Performance obligation		89,719		80,000	
	Revenue - contract			95,657		80,000
	Interest expense		5,938			
	7,971	<i>per month, see amortization table for interest</i>				
	Expenses		75,000		75,000	
	Cash			75,000		75,000
		<b>Gross profit</b>	<b>14,719</b>	<b>15%</b>	<b>5,000</b>	<b>6%</b>
		<b>Cumulative gross profit</b>	<b>145,000</b>	<b>28%</b>	<b>145,000</b>	<b>28%</b>

Appendix C, continued

Scenario 1 with time-value-of-money treatment			Scenario 1 per ED Example 2			
Performance Obligation			Performance Obligation			
	20,000	(20,000)		20,000	(20,000)	
	220,000	(240,000)		220,000	(240,000)	
70,660		(169,340)	80,000		(160,000)	
79,621		(89,719)	80,000		(80,000)	
89,719		(0)	80,000		-	
Scenario 2 - provider determines that the prices of old and new contracts are interdependent						
<b>The only difference between Scenario 1 and 2 is the entry at contract modification during 3rd year</b>						
			With Time Value of Money		Solution per ED Example 2	
			Debit	Credit	Debit	Credit
Year 3	Cash		100,000		100,000	
	Revenue -contract			40,000		40,000
	Performance obligation			60,000		60,000
	<i>This is the "catch-up" adjustment for prior "errors"</i>					
	<i>Since contract should have been \$80K per year for 6 yrs</i>					
	Expenses		60,000		60,000	
	Cash			60,000		60,000
Year 3	Cash		180,000		180,000	
	Performance obligation			180,000		180,000
	Gross profit	(20,000)	-50%	(20,000)	-50%	
	Cumulative gross profit to date	75,000	31%	75,000	31%	
	Cumulative GP for all 6 years	105,000	22%	105,000	22%	
<b>The journal entries are similar except that the cash received in total is lower so the gross profit recognized during the 6 years is \$105,000 instead of \$145,000. The entire difference is recognized in the third year</b>						
<b>There is a loss of \$20,000 instead of a profit of \$20,000. This accounts for the \$40,000 total difference.</b>						
Scenario 2 with time value of money			Scenario 2 per ED Example 2			
Performance Obligation			Performance Obligation			
	20,000	(20,000)		60,000	(60,000)	
	220,000	(240,000)		180,000	(240,000)	
70,660		(169,340)	80,000	-	(160,000)	
79,621		(89,719)	80,000		(80,000)	
89,719		(0)	80,000		-	

Excel sheet is posted on my website: **Time-value-of-money Ex 2Rev, 21, and 22.xlsx**

## Appendix D, Unintended Consequences of Proposed Handling of Product Warranty that Is Not a Performance Obligation – Example 4

In Example 4, the accounting for a product warranty to replace defective units during a 90 day return period is handled in a manner almost identical to the right-of-return situation illustrated in Example 3. The main difference, however, is substantive. The returned products in Example 3 are in good condition and can be returned to inventory at original cost. The customer gets a refund (or accounts receivable is reduced) for the selling price. In Example 4, the customer receives a new item (hopefully without defects) and there is no refund. What SHOULD make the accounting different is the fact that the defective units cannot be merely returned to inventory – they will require re-work before they can be re-sold. [The exception would be for the “middleman” distributor or wholesaler who would return the defective units to the manufacturer and get a full refund – so I’m really talking about the manufacturer] Generally, refurbished items are sold at a discount to the consumer. However, given our “long accepted” lower of cost or market rules, we get a perverse result. Unless the returned items require repairs in excess of the profit margin, they can be recorded at “replacement cost” or basically the full value.

With this approach, the provision for returns of defective units has essentially no real effect on the financial results (unless they are worthless or will cost more to repair than it cost to make them in the first place). There might be a slight timing difference until the return period expires but the profitability is the same. Basically, one merely has to close the right to “receive defective units” to cost of goods sold and the performance obligation to sales (or revenue). Absolutely no analysis would be required (as I learned when I experimented with returns in excess of expectations or below expectations.) This seems to open room for abuse – to inflate earnings, companies can ship product known to be defective and there is no real bottom-line impact of a poor forecast of defects.

My first “fix” was to decide the lower of cost or market rules in ASC 330 need to be re-vamped or at least we need better guidance for the valuation of defective items returned for replacement. My proposal is that the work-in-process inventory should be debited for the **replacement cost less the expected cost to repair**.

Later I noticed paragraph 59(c) in the ED which calls for immediate recognition of “abnormal amounts of wasted materials, labor or other resources used to fulfill the contract.” If you want better compliance and consistency between companies, I suggest that the abnormal returns treatment be included in the example rather than glossed over! However, I think the “best” approach would be to require that products returned because they are defective (under a warranty that is not a separate performance obligation) should be recognized at replacement cost less the estimated cost of repairs. If no estimate of repair costs can be made, the returned items should be considered worthless and carried at zero value in inventory. The traditional lower-of-cost-or-market rules could then be retained for all other evaluations of inventory for impairment. It is not useful to anyone to have units KNOWN to be defective carried on the books at full replacement costs!

ASSUMPTIONS added include average cost to repair of \$150 and a \$950 (instead of \$1000) selling price for refurbished units. These assumptions still produce a lower of cost or market figure equal to the \$600 replacement cost. With these assumptions, the cost of repairs would have to increase to \$351 or more before the lower-of-cost-or-market rule would produce an inventory value of less than the \$600 cost to manufacture or buy. Also note that I did NOT MAKE the modification to contract as done at the bottom of the ED example. Instead, I made entries with the original assumption of 10 defective units.

Excel file is available at my website: Example 4, Product Warranty that is not a performance obligation.xlsx

Appendix D, continued  
 Handling the Return of Defective Products

			Example 4		Adjusted WIP Inventory	
			Solution per ED Example		Possible "FIX" No. 1	
<b>At date of shipping or delivery:</b>			Debit	Credit	Debit	Credit
	Accounts receivable (or cash)		1,000,000		1,000,000	
	Sales (of good product)			990,000		990,000
	Liability to replace defective products			10,000		10,000
990	Cost of goods sold		594,000		594,000	
1,000	Inventory			600,000		600,000
	Right to receive defective units		6,000		6,000	
<b>Scenario 1</b>						
<b>What if customers actually return 13 items within 90 days?</b>						
13	Inventory	\$ 600.00		7,800		7,800
	Work in process inventory	\$ 450.00	7,800		5,850	
	Right to receive defective units			6,000		6,000
	Cost of goods sold	plug	6,000		7,950	
<i>Remove replacement units from inventory, zero out contract asset, recognize defective units with any difference adjusted to cost of goods sold</i>						
<i>For all variations other than "Fix 1," returned inventory is at \$600 LCM</i>						
3	Cost of goods sold (abnormal costs)	600				
	Work in process inventory					
<i>Recognize abnormal amounts of wasted materials, labor and other costs</i>						
13	Sales	plug		10,000		10,000
	Accounts receivable (no change)			-		-
	Liability to replace defective products		10,000		10,000	
<i>Adjust liability to zero and reduce sales as necessary</i>			1,623,800	1,623,800	1,623,800	1,623,800
<b>Scenario 1</b>						
987	Gross profit for good units shipped		400	394,800	400	394,800
13	Gross profit for replacement units		400	5,200	250	3,200
	<i>Less abnormal loss and waste of materials</i>					
	<i>Total gross profit recognized</i>			400,000		398,000

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Appendix D, continued  
 Handling the Return of Defective Products

In Scenario 2 below, no abnormal losses are recognized because there were fewer than expected returns. If the returned items were worthless, the gross profit would drop from \$400,000 to \$395,200 in Scenario 2. For Scenario 1, the gross profit under the ED would be \$392,200 if all returned items were scrapped as worthless.

			Example 4 Solution per ED Example		Adjusted WIP Inven Possible "FIX" N	
Scenario 2			Debit	Credit	Debit	C
<b>What if customers only return 8 items within 90 days?</b>						
8	Inventory	\$ 600.00		4,800		
\$ 450.00	Work in process inventory		4,800		3,600	
	Right to receive defective units			6,000		
	Cost of goods sold	plug	6,000		7,200	
	<i>Adjust inventory to actual and zero out contract asset</i>					
-	Cost of goods sold (abnormal costs)	600				
	Work in process inventory					
	<i>Recognize abnormal amounts of wasted materials, labor and other costs</i>					
	Sales	plug		10,000		
	Accounts receivable (no change)			-		
	Liability to replace defective products		10,000		10,000	
	<i>Adjust liability to zero and reduce sales as necessary</i>		20,800	20,800	20,800	
<b>Scenario 2</b>						
992	Gross profit for good units shipped		400	396,800	400	
8	Gross profit for replacement units		400	3,200	250	
	<i>Less abnormal loss and waste of materials</i>					
	<i>Total gross profit recognized</i>			400,000		

Two related files at website: Example 4, Product Warranty That is Not a Performance Obligation.xlsx and Example D in Multiple Style A, B, C, D for RevRecog ED.xlsx

## Appendix E – Three Possible Rules of Thumb for Inevitable Errors in Estimating Utilization, Returns, Costs and Other Factors Involved in Allocation of Transaction Price to Components of Contracts with Customers.

The transaction prices can be over- or underestimated due to multiple factors including return rates, coupon utilization rates, defect rates and other factors used to allocate the transaction price to performance obligations. The following rules of thumb are intended to demonstrate how minor estimate errors could be adjusted. Major estimation errors would result in a modification of the transaction price.

### 1. Performance obligations related to product sales:

For transactions involving the sale of products rather than services, periodic adjustments to *contract-related assets for product returns* as well as *performance obligation* accounts are necessary when estimates are close but not right on target.

Adjustments that debit *performance obligations* would have a credit to sales because they represent the underestimation of profit in prior periods. Generally, it will also be necessary to credit any “right to receive asset” account with a debit to either cost of goods sold or sales. This procedure will restore the gross not previously recognized due to the overestimation of returns.

Adjustments that credit performance obligations should result in a debit to expense because they represent unexpected or abnormal losses caused by recognizing too much profit in prior periods. Generally, it will also be necessary to debit any “right to receive asset” account to the same unexpected or abnormal losses account. With this procedure, the abnormal losses from excessive returns are measured at the gross profit forgone.

### 2. Other performance obligations

Many performance obligations relate to services to be delivered in a future period or other benefits that the customer will receive at a later point in time such as free or reduced cost goods or services related to coupons, rebates, customer loyalty programs and the like.

In these circumstances, the performance obligation is merely revenue delayed so it can be associated with the appropriate period of time. Accordingly, any adjustments that debit *performance obligations* would have a corresponding credit to sales because the need for a debit was likely caused by the underestimation of revenue in prior periods. Likewise, adjustments that credit performance obligations should have a corresponding debit to sales because too much revenue was recognized in the prior period. Alternately, an expense account could be debited as appropriate, perhaps related to marketing programs that turn out to be more costly than anticipated. This would be particularly true if the estimation errors were severe enough to trigger a modification of transaction prices.

### 3. Adjusting contra-receivable accounts

Credit losses, prompt payment discounts and the returns of good products for refund are examples of reductions in the transaction price that are not considered performance obligations. Traditionally, credit losses have been accounted for in an allowance for bad debts that reduces accounts receivable. Prompt payment discounts can also be handled with an allowance account or by direct reduction of receivables. The uncertainty around these accounts is settled when the customer pays the receivable. Generally, adjustments to the allowance for bad debt expense are debited or credited to bad debt expense. Major errors in estimation might trigger a modification of transaction prices. In this case, a debit or credit to sales might be more appropriate. If an allowance for cash discounts account is used, any credit adjustments would generally have a debit to expense and any debit adjustments would generally have a credit to other revenue or interest revenue.

An allowance account can also be used for sales with a right of return. The terms of the sale generally do not require full payment before the end of the return period. Accordingly, the return of products establishes the amount due from the customer or the refund due to the customer. Adjustments to the allowance for product returns would be handled in accord with Rule of Thumb No. 1 (above).

Related Examples for the first rule of thumb

Appendix D – return of defective products

Example C – sales with right of return [on my website]

Example D – return of defective units for replacement [on my website]

Related examples for the second rule of thumb

Example 24 (Appendix E)

Example 5,25 (Appendix F)

Related examples for third rule of thumb

Example A – prompt payment discounts [on my website]

Example B – credit losses [on my website]

#### **Expanded version of Example 24 (\$1 off coupons):**

Note that the actual gross profit will always be MORE than the expected gross profit – by the amount set aside for the performance obligation for coupons. The estimate does not need to be accurate! The bottom line profit might get shifted from one period to another (by deliberate estimation errors) but the initial sale means that the profit is known up-front (at least for cash sales). The amount of profit would, of course, differ if the sales were on account since it is possible that not every customer would pay. This same situation holds true for customer loyalty programs. As a practical matter when multiple coupon obligations exist, it may not be feasible to identify “abnormally high” rates of use. Accordingly, an acceptable procedure with no bottom-line effect would be to always make any adjustment to the performance obligation to sales (debit or credit). Otherwise, a company would need to keep track of multiple promotions on some first-in, first-out or other basis to decide whether the performance obligation was initially over or understated.

Appendix E, continued  
 Expanded Version of Example 24 in the ED

<b>Example 24 - expanded</b>					
<b>WHAT IF WE COULD ESTIMATE THE UTILIZATION RATE FOR THE COUPONS?</b>					
1,000	units sold at	\$ 8.00	Cost of merchandise		
	Coupons issue	\$ 1.00	Per unit=	\$ 4.00	
	Net price with	\$ 7.00			
Probability		Total Value	Units	Expected Revenue	
40%	Coupon not used	\$ 8.00	400	3,200	
60%	Coupons used	\$ 7.00	600	4,200	
			1,000	7,400	
Sales of goods and services				debit	credit
	Cash			8,000	
	Sales				7,400
	Performance obligation for coupons				600
	Cost of goods sold			4,000	
	Inventory				4,000
				12,000	12,000
3,400	Expected gross profit		46%		
<b>Scenario 1 What happens if, in fact, 800 coupons are used? Do we DECREASE sales?</b>					
Expiration date:				debit	credit
	Performance obligation for coupons			800	
	Sales (some other revenue account?)				800
	Performance obligation for coupons				200
????	Sales OR Promotion expense			200	
				1,000	1,000
4,000	Actual gross profit		54%		of initial sales recognized
<b>Scenario 2 What happens if, in fact, only 500 coupons are used? Do we INCREASE sales?</b>					
Expiration date:				debit	credit
	Performance obligation for coupons			500	
	Sales (some other revenue account?)				500
	Performance obligation for coupons			100	
????	Sales OR Promotion expense				100
				600	600
4,000	Actual gross profit		54%		of initial sales recognized
Scenario 1			Scenario 2		
Performance Obligation - coupons			Performance Obligation - coupons		
	600	(600)		600	(600)
800		200	500		(100)
	200	-	100		-
		-			-

Appendix F – Variation of Examples 5 & 25 on Issue of Change in Estimate versus Contract Modification

	Product A sells for	\$ 100	Cost =	\$ 40.00
	Comes with coupon for	40%	off future purchases up to	\$100
	Season promotion anticipated	10%	off future purchases up to	\$100
	Normal gross profit on sales	60%		
Separate performance obligations:				
1,000	units sold	assumption added		
80%	Utilization of coupon is expected			
\$ 50	Expected amount of average purchase using coupon			\$ 50.00
40%	Customer forgoes the 10% discount to get the 40% so real value is			30%
\$ 20.00	Value to customer			\$ 15.00
80%	expected value if there is no future discount		Utilization rate =	80%
\$ 16.00	Estimated value of the coupon to the customer			\$ 12.00
Allocate transaction price to the individual performance obligations				
	Product A	\$ 100.00	89.29%	\$ 89.29
	Coupon	\$ 12.00	10.71%	\$ 10.71
		\$ 112.00	100%	\$ 100.00
Units sold		Total Sales	Expected use by customers	Revenue to recognize per coupon
1,000	Assigned to product sales	89,285.71		
80%	Assigned to coupons	10,714.29	800	\$ 13.39
800	Coupons redeemed (expected)	100,000.00		
			-	
<b>At date of product sales (coupons issued)</b>			<u>Debit</u>	<u>Credit</u>
	Cash		100,000	
	Sales revenue			89,286
	Performance obligation - coupons			10,714
	Cost of goods sold		40,000	
	Inventory			40,000
49,286	Gross profit in period product sold	55.2%		
	Expected gross profit next period (10% sale)	55.6%	(if no coupons are used)	
	Normal profit margin as % of selling price	60.0%		
<b>Scenario 1</b>				
<b>Assume that coupon utilization and all other assumptions were perfectly predictive</b>				
All customers			Sales with coupon	Other Sales with no coupon
\$ 75.00	average sale before discount (at list price)		\$ 50.00	\$ 100.00
1,600	Number of customers		800	800
120,000	total sales before coupon		40,000	80,000
various	Discounts received by customers		40%	10%
24,000			16,000	8,000
96,000	Cash received		24,000	72,000
48,000	Cost of sales (40% of retail list price)		16,000	32,000
<i>Note that these assumptions show an increase of 20% in sales partially due to the coupons</i>				

Journal entries in next accounting period (coupons used)			Debit	Credit
	Cash		96,000	
Coupons=	Sales	plug sales		106,714
800	Performance obligation	\$ 13.39	10,714	
	Cost of goods sold (40% of list price)		48,000	
	Inventory			48,000
			154,714	154,714
58,714	Profit Margin this period (overall)	55.0%		
			Performance obligation	
			10,714	(10,714)
		10,714		-
				-
<b>Scenario 2</b>				
<b>What if coupon utilization (and/or average purchase) is HIGHER than expected?</b>				
All customers			Sales with coupon	Other Sales with no coupon
\$ 78.82	average sale before discount (at list price)		\$ 60.00	\$ 100.00
1,700	Number of customers		900	800
134,000	total sales before coupon		54,000	80,000
various	Discounts received by customers		40%	10%
29,600			21,600	8,000
104,400	Cash received		32,400	72,000
53,600	Cost of sales (40% of retail list price)		21,600	32,000
<i>Note that these assumptions show an increase of 20% in sales partially due to the coupons</i>				
Journal entries in next accounting period (coupons used)			Debit	Credit
	Cash		104,400	
Coupons=	Sales revenue	plug sales		116,454
900	Performance obligation	\$ 13.39	12,054	
	Cost of goods sold (40% of list price)		53,600	
	Inventory			53,600
			170,054	170,054
62,854	Profit Margin this period (overall)	54.0% before adjustment		
			Performance obligation	
			10,714	(10,714)
		12,054		1,339
				1,339
<b>Adjusting entry needed:</b>			Debit	Credit
	Promotion expense		1,339	
	Performance obligation			1,339
<b>Or merely zero out performance obligation regardless of actual experience</b>				
<b>In which case the "abnormal loss" will never be recognized.</b>				
61,515	Profit Margin this period (overall)	52.8% after adjustment		

<b>Scenario 2a</b>				
<b>What if this is a modification of the contract price?</b>				
	If we now expect 90% utilization and a \$60 purchase * 30%, each coupon is worth \$16.20 instead of 13.39			14,580
	Originally predicted			10,714
	Lost sales from use of coupon			3,866
<b>Adjusting entry needed:</b>				
			<u>Debit</u>	<u>Credit</u>
	Promotion expense (?)		3,866	
	Performance obligation			3,866
<i>Note this is not an onerous contract because the sales with coupon are still profitable.</i>				
<b>Journal entries as coupons are used by customers</b>				
			<u>Debit</u>	<u>Credit</u>
	Cash		104,400	
Coupons=	Sales revenue	plug sales		118,980
900	Performance obligation	\$ 16.20	14,580	
	Cost of goods sold (40% of list price)		53,600	
	Inventory			53,600
			<u>172,580</u>	<u>172,580</u>
61,514	Profit Margin this period (overall)	51.7% after modification		
			Performance obligation	
			10,714	(10,714)
			3,866	(14,580)
<b>Scenario 3</b>				
		14,580		-
<b>What if coupon utilization (and/or average purchase) is LESS than expected?</b>				
All customers			Sales with coupon	Other Sales with no coupon
\$ 76.43	average sale before discount (at list price)		\$ 45.00	\$ 100.00
1,400	Number of customers		600	800
107,000	total sales before coupon		27,000	80,000
various	Discounts received by customers		40%	10%
18,800			10,800	8,000
88,200	Cash received		16,200	72,000
<b>Journal entries in next accounting period (coupons used)</b>				
			<u>Debit</u>	<u>Credit</u>
	Cash		88,200	
Coupons=	Sales revenue	plug sales		96,236
600	Performance obligation	\$ 13.39	8,036	
	Cost of goods sold (40% of list price)		42,800	
	Inventory			42,800
			<u>139,036</u>	<u>139,036</u>
53,436	Profit Margin this period (overall)	55.5% before adjustment		
			Performance obligation	
			10,714	(10,714)
		8,036		(2,679)
<b>Adjusting entry needed:</b>				
			<u>Debit</u>	<u>Credit</u>
	Sales revenue			2,679
	Performance obligation		2,679	
56,115	Profit Margin this period (overall)	58.3% after adjustment		

Appendix G – A list of Account Titles with Notations Regarding Status as Performance Obligations or Contract Assets and Other Presentation Issues

	Performance Obligations (liabilities)	Other Miscellaneous (Current) Liability Accounts Used that Are <b>NOT</b> Performance Obligations
My Examples A & B (not in appendix)	<i>Reductions of invoice price for expected <b>credit losses</b> or <b>prompt payment discounts</b> are illustrated at my website (not in ED). They never give rise to performance obligations or liabilities.</i>	<i>Allowance accounts against A/R are appropriate (but not mandatory) because prompt payment discounts and bad debts are settled by customer payments. There is no remaining asset or liability once the account is paid in full. Contrast this to Example 3 and Example 4 provisions for product returns.</i>
Example 2	Prepaid maintenance services liability <i>{continuously delivered so matched to time periods covered}</i>	
Example 3		<i>Liability for product returns (under right of return contracts) {Why isn't this one an allowance against A/R like credit losses or prompt payment discounts? Probably because the obligation is not settled by customer payment of the original invoice. The liability is to refund part of amounts already received or receivable}</i>
Example 4	<i>Liability to replace defective products {Part of the performance obligation to deliver good products to customers. It is a liability rather than an allowance against A/R because the obligation remains even after the customer pays in full. Revenue recognition is deferred until replacement products are shipped in a later period}</i>	
Example 5, 25	<i>Unexpired discount coupons outstanding {a separate performance obligation arising from the original sale of product, revenue recognized in later period when coupons are presented}</i>	
Example 14		<i>Repurchase liability {Seems like it is part of the obligation to repurchase the assets but it is not a performance obligation because the seller may have to repay the purchaser as though the sale never happened. However, treatment as an allowance against A/R would not be logical since the purpose of the transaction is to get cash immediately rather than later. Cash receipt does not obviate the possible need to for a later refund.}</i>
Example 15-1	Progress billings in excess of contract performance	
Example 15-2		Netting of construction-in-progress against performance obligation????
Example 21	Performance obligation (net of amounts to be recognized as interest revenue)	
Example 22	Performance obligation (increases as interest expense is recognized)	
Example 23		<i>{Slotting expense is recognized immediately at fair value even if revenue is spread over a relevant time period – so there does not appear to be a contract asset or liability or maybe I just don't understand the example}</i>
Example 24	Performance obligation (initially equals face value of all coupons issued because not estimable)	

## T. Gordon Comments on 1820-100

## Appendix G, continued

	Contract Assets	Other Miscellaneous (Current) Asset Accounts Used that are <b>NOT</b> "Contract Assets"
Example 3		Right to receive (good) products
Example 4		Right to receive defective products
Example 11		Construction-in-progress inventory
Example 14	Right to receive asset (????)  Unclear in example	{Presumably this is a contract asset because the full consideration has been received but it is not yet unconditional – <b>if so Example 14 needs fixing!</b> }
Example 15-1 Example 15-2	Unbilled service revenue in excess of related progress payments { <i>seller does not yet have unconditional right to consideration until acceptance by customer</i> }	Work-in-process inventory (or netted against performance obligation?)
Example 19	Anticipated bonus {Consideration has not yet been received and there is no unconditional right to receive the bonus; the amount should not be included as part of A/R}	
Example 29-3	Contract asset {in lieu of receivable because there is not yet an unconditional right to the consideration}	

## Balance sheet

## ASSETS

## Accounts receivable

Ex. 20, B	Less allowance for bad debts
Ex A	Less prompt payment discounts
Ex C	Less refunds for product returns

## CONTRACT ASSETS

Ex. 19	Estimated performance bonus
Ex 29-3	Contract asset (no unconditional right to consideration)
Ex 15-1	Unbilled service revenues in excess of related progress payments

Finished goods inventory  
Raw materials inventory  
Work-in-process inventory  
Construction-in-progress inventory

OTHER ASSETS - related to inventories, generally at cost to vendor rather than selling price

Ex 3	Resalable products to be returned
Ex 4	Defective products to be returned
Ex 14	Right to receive asset under repurchase agreement

Balance sheet

LIABILITIES

PERFORMANCE OBLIGATIONS:

Unexpired discount coupons outstanding (full or partial value depending on ability to estimate utilization)

Prepaid maintenance services liability (if long-term, increases as interest expense is recognized)

Progress billings in excess of contract performance

Ex 23 Prepaid slotting fees (to be amortized over relevant time periods)

OTHER CONTRACT-RELATED LIABILITIES:

Ex 3 Liability for product returns (under right of return contract)

Ex 4 Liability for replacement of defective products

Ex 14 Repurchase obligation

**Income Statement**

Sales revenue from service contracts

Sales revenue from product sales

Sales revenue from customer use of product coupons, rebates, etc.

Net of things that are NOT performance obligations (when sales are reported gross)

Ex 3 Less estimated return of product under right-of-return contracts

Ex 20 Less estimated credit losses (gross method)

Ex A Less prompt payment discounts taken (gross method)

Ex 14 Less estimated repurchases from customers

Net of things that are performance obligations (if sales are reported gross)

Ex 21 Less time-value-of-money discounts related to payments in arrears

Ex 4 Less estimated replacement price for products with latent defects

**Net sales to customers**

Beginning inventory

Add purchases

Less prompt payment discounts taken

Ex 3, 14(?) Add returns from customers for refund

Ex 4 Add returns for replacement due to defects

Less ending inventory

=cost of goods sold

**Gross profit**

## T. Gordon Comments on 1820-100

**Other revenues:**

Ex 21	Interest revenue on customer contracts in arrears
Ex A	Prompt payment discounts not taken (net method or combination method)

**Other expenses:**

Ex 22	Interest expense on prepaid customer contracts
Ex 5,25, 24	Promotion expense (to adjust coupon performance obligation to actual)
Ex 20, Ex B	Bad debt expense (as needed to adjust allowance for bad debts)
Ex 23	Slotting fee expense
	Cost to obtain contract
	Costs related to already satisfied performance obligations
	Abnormal mounts of wasted materials, labor or other contract costs

Possible alternative display to help reader understand impact of product returns:

Beginning inventory	
Add purchases	
Add returns from customers for refund	at cost
Add returns from customers for replacement	at cost
Less cost of products sold to customers	
=Ending inventory	