



**UNIVERSIDAD DE LAS
AMÉRICAS, A.C.**

Ciudad de México

**MANUAL DE PRÁCTICAS
AD486 / CA481A**

Práctica Integradora en Finanzas

Primavera 2008

Licenciatura en Administración de Empresas
AD486 / CA481A PRÁCTICA INTEGRADORA EN FINANZAS

FECHA	SESIÓN	ACTIVIDAD	PRÁCTICA
Ene – 09	1	Tema 1: Análisis Financiero de Empresas	
Ene – 14	2	Práctica 1: Análisis Financiero de Empresas	0
Ene – 16	3	Práctica 1: Análisis Financiero de Empresas	0
Ene – 21	4	Práctica 1: Análisis Financiero de Empresas	0
Ene – 23	5	Tema 2: Proyecciones y planes financieros de empresas	
Ene – 28	6	Práctica 2: Proyecciones y planes financieros de empresas	0
Ene – 30	7	Práctica 2: Proyecciones y planes financieros de empresas	0
Feb – 06	8	Práctica 2: Proyecciones y planes financieros de empresas	0
Feb – 11	9	Tema 3: Formulación y Evaluación de Proyectos de Inversión	
Feb – 13	10	Práctica 3: Formulación y Evaluación de Proyectos de Inversión	0
Feb – 18	11	Práctica 3: Formulación y Evaluación de Proyectos de Inversión	0
Feb – 20	12	Práctica 3: Formulación y Evaluación de Proyectos de Inversión	0
Feb – 25	13	Tema 4: Evaluación y Diseño de Políticas de Capital de Trabajo	
Feb – 27	14	Práctica 4: Administración del Capital de Trabajo	0
Mar – 03	15	Práctica 4: Administración del Capital de Trabajo	0
Mar – 05	16	Práctica 4: Administración del Capital de Trabajo	0
Mar – 10	17	EXAMEN DE MEDIO SEMESTRE	
Mar – 12	18	Tema 5: Formulación y Evaluación de Alternativas de Financiamiento	
Mar – 24	19	Práctica 5: Costo de capital	0
Mar – 26	20	Práctica 5: Costo de capital	0
Mar – 31	21	Práctica 5: Costo de capital	0
Abr – 02	22	Práctica 6: Estructura de capital	0
Abr – 07	23	Práctica 7: Financiamiento empresarial de largo plazo	0
Abr – 09	24	Práctica 8: Valuación	0
Abr – 14	25	Práctica 9: Inversiones	0
Abr – 16	26	Práctica 9: Inversiones	0
Abr – 21	27	Tema 6: Operaciones y Transacciones Financieras Internacionales	
Abr – 23	28	Práctica 10: Pagos en el comercio internacional	0
Abr – 28	29	Práctica 10: Pagos en el comercio internacional	0
Abr – 30	30	Tema 7: Diseño y Evaluación de Portafolios de Inversión	
May – 07	31	Práctica 11: Administración de Riesgos	0
May – 12	32	Práctica 11: Administración de Riesgos	0
May – 14	33	EXAMEN FINAL	

PRESENTACIÓN

¡¡ Bienvenido a tu Práctica Integradora en Finanzas!!

Nos da mucho gusto poder participar contigo de esta experiencia práctica en la que tendrás oportunidad de incorporar los conocimientos teórico-prácticos que vienes adquiriendo en las asignaturas de finanzas, a la toma de decisiones financieras.

La PRÁCTICA INTEGRADORA EN EL SECTOR FINANCIERO, tiene como objetivo general *que el estudiante sea capaz de integrar los conocimientos y habilidades adquiridas en el transcurso de la carrera en el área de las finanzas*. De esta forma, se busca que el estudiante desarrolle una actividad que le permita validar en la práctica de la actividad financiera su capacidad como futuro profesional a partir de la aplicación del universo de los conocimientos adquiridos en las diversas asignaturas del área financiera.

OBJETIVO GENERAL

El objeto del presente Manual es presentar y describir las actividades a desarrollar por los estudiantes en estas prácticas, y de esta forma comprendan, apliquen, analicen, integren y tomen decisiones financieras.

Como cada estudiante es el artífice de su aprendizaje, el profesor como orientador del curso tratará de facilitar dicho proceso, señalando materiales, aclarando hechos concretos y ayudando a crear un ambiente de curiosidad académica y de investigación.

METODOLOGÍA

El curso se desarrolla en el marco de las pedagogías activas y como tal presupone un intenso trabajo por parte de cada estudiante dentro y fuera del aula. Antes de cada sesión deberán "Estudiarse" el (los) capítulo (s) y lecturas previamente asignados y formulado respuesta a los problemas, ejercicios y casos señalados.

En las secciones de clase se llevarán a cabo controles de lectura, solución de dudas y solución a dificultades concretas de la aplicación de la teoría a **casos prácticos**.

Como cada estudiante es el artífice de su aprendizaje, el profesor como orientador del curso tratará de facilitar dicho proceso, señalando materiales, aclarando hechos concretos y ayudando a crear un ambiente de curiosidad académica y de investigación.

HABILIDADES Y VALORES PROFESIONALES A DESARROLLAR DURANTE EL DESARROLLO DE LOS TALLERES:

HABILIDADES:

Organización: Capacidad para planear, ejecutar y posteriormente articular un conjunto de actividades dentro de un plan o proyecto con objetivos específicos, dentro de un plan o proyecto con objetivos específicos dentro de límites de tiempo, espacio y con unos recursos que pueden existir previamente o que deben ser obtenidos.

Trabajo en Equipo: La habilidad de aceptar y comprometerse con la responsabilidad de distribuir, compartir y recibir exigencias entre los miembros de un grupo de personas para la búsqueda y alcance de un objetivo común.

Análisis: La capacidad de examinar un objetivo o una situación compleja y apreciar sus partes o elementos constituyentes y las relaciones entre éstos.

Comunicación: La habilidad para leer diferentes tipos de contexto con comprensión completa de emitir juicios críticos sobre ese contenido.

La habilidad para escribir cartas, informes, ensayos en correcto español con el orden y claridad conceptual necesarios para una fácil comprensión por parte del lector.

La habilidad para comunicarse verbalmente en diferentes contextos; diálogos, presentación a un grupo, discurso, con orden, claridad y corrección de contenido y con la presentación verbal apropiada.

Trabajo bajo presión: La capacidad para no perder la calma, el buen trato y el sentido de las prioridades al enfrentar un alto volumen de trabajo a realizar con estándares de calidad y tiempo de respuesta exigente.

Manejo de información: Capacidad para definir la relevancia y aplicabilidad de datos e información.

Aprendizaje individual permanente: La habilidad de definir el área o tema de su interés; buscar la información bien sea en textos, artículos, material audiovisual, internet, otras personas, de planificar, organizar y cumplir con espacios de estudio.

Habilidad en el manejo básico de la computadora como instrumento de trabajo: Incluye el uso de Windows, Word, Excel, Correo Electrónico, Power Point, Internet y software especializado si fuera el caso.

VALORES:

Responsabilidad: Dar cuenta de sus propios actos y de aquello que se le encomiende.

Integridad: Ser intachable y consistente entre lo que se cree, se dice y se hace.

Honestidad: Proceder con honradez, rectitud y veracidad en todas las acciones de la vida.

Curiosidad Intelectual: Desear ampliar las fronteras del conocimiento propio.

CONTENIDO

Presentación	3
Indicaciones Metódicas y Organizativas	8
Práctica 1 ANÁLISIS FINANCIERO DE EMPRESAS.....	11
Parte I. Diagnóstico de Contabilidad y Análisis e Interpretación de Estados Financieros.....	
Parte II. Estudio del Caso: La Comercial, S.A. de C.V.	
Parte III. Estudio del Caso: Greenleaf Nursery, Inc.	
Parte IV. Análisis Financiero de una Empresa Real.....	
Práctica 2 ELABORACIÓN DE PROYECCIONES Y PLANES FINANCIEROS DE EMPRESAS.....	29
Parte I. Elaboración de Estados Financieros Proforma a Partir de Razones Financieras.....	
Parte II. Estudio del Caso: The Collegiate Corner.....	
Práctica 3 FORMULACIÓN Y EVALUACIÓN DE PROYECTOS DE INVERSIÓN.....	35
Parte I. Estudio del Caso: Tecnología de Cómputo, S.A. de C.V.	
Parte II. Estudio de un Caso Real de Evaluación de Proyectos de inversión.....	
Práctica 4 ADMINISTRACIÓN DEL CAPITAL DE TRABAJO.....	39
Parte I. Estudio del Caso: Vista World, Inc.	
Parte II. Estudio del Caso: Baxter Furniture Company.....	
Parte III. Estudio del Caso: Kiddyland Clothes , Inc.	
Práctica 5 COSTO DE CAPITAL.....	55
Parte I. Estudio del Caso: Advanced Technology Company.....	
Parte II. Estudio del Caso: Beltway Technologies, Inc.	
Parte III. Estudio del Caso: Yardley Brothers, Inc.	
Práctica 6 ESTRUCTURA DE CAPITAL.....	72
Estudio del Caso: Floral Concepts, Inc.	
Práctica 7 FINANCIAMIENTO EMPRESARIAL A LARGO PLAZO.....	80
Parte I. Estudio del Caso: Metrex Manufacturing, Inc.	
Parte II. Análisis de las Fuentes de Financiamiento en México .	
Práctica 8 VALUACIÓN.....	85
Estudio del Caso: The Primo Pizza Company	

Práctica 9 INVERSIONES.....	93
Práctica 10 PAGOS EN EL COMERCIO INTERNACIONAL.....	97
Práctica 11 ADMINISTRACIÓN DE RIESGOS.....	99

INDICACIONES METÓDICAS Y ORGANIZATIVAS

- I. El curso se desarrolla en el marco de las técnicas didácticas activas y como tal presupone un intenso trabajo por parte de cada estudiante dentro y fuera del aula. Antes de cada sesión deberán "estudiarse" el(los) capítulo(s) y lectura(s) previamente asignados y deben haberse formulado respuesta a los problemas, ejercicios señalados.
- II. A partir del objetivo general instructivo que se persiguen con la Práctica Integradora en el Sector Financiero, se deberá asegurar el cumplimiento de los siguientes objetivos educativos (actitudes y valores) específicos con las mismas, en la actividad de los estudiantes:
 - A. Mostrar la capacidad de trabajo en equipo
 - B. Mostrar capacidad organizativa
 - C. Mostrar capacidad de trabajo bajo presión
 - D. Mostrar la habilidad para redactar informes
 - E. Mostrar capacidad de definir y procesar la información relevante para la toma de decisiones
 - F. Mostrar la capacidad de comunicación oral y de debate de ideas y criterios
 - G. Mostrar capacidad para entender las lecturas especializadas en finanzas y el empleo del lenguaje técnico en este campo, todo ello en idioma inglés, además del idioma español
 - H. Mostrar capacidad de empleo de las técnicas computacionales en su actividad
 - I. Mostrar creatividad y hábitos de investigación en la actividad práctica
 - J. Mostrar la capacidad crítica y evaluativa en su propio trabajo y en el trabajo de sus compañeros
 - K. Mostrar una conducta ética y los valores propios que deben regir su actividad profesional
- III. Cada sesión lectiva de la Práctica abarcará tres horas, y al iniciarse el semestre el profesor :

- A. Explicará los objetivos y brindará una explicación de la organización y la metodología para el desarrollo de las prácticas así como el calendario para la realización de las actividades.
 - B. Organizará al grupo de clase en equipos de estudiantes, los cuales se sugiere que no estén integrados por más de cinco, para asegurar la participación efectiva de cada uno de sus miembros.
- IV. Las prácticas tendrán dos componentes: uno lectivo y otro de aplicación.
- V. El componente lectivo se realizará en el salón de clases, y tiene como objetivos el reforzamiento de los conocimientos sobre las finanzas, tanto empresariales como las bursátiles, adquiridos en las asignaturas de este campo de formación en la carrera, y su integración en la forma en que tienen lugar en la actividad práctica.
- VI. El componente de aplicación se refiere a la elaboración, exposición y defensa de un trabajo de investigación de un caso práctica de la actividad financiera mexicana
- VII. La evaluación de la Prácticas se realizará de acuerdo a los rubros siguientes:

	%
Evaluaciones Parciales I y II:	15 c/u
Examen de Medio Semestre	35
Examen Final	35

* Las evaluaciones serán totalmente prácticas.

- a) *Solución y presentación de casos.* Consistirá en casos de estudio. La calificación se determinará como el promedio de las calificaciones obtenidas en estos casos. El profesor seleccionará al azar el equipo que deberá dar solución en el salón, del caso que corresponda. Los restantes equipos solamente deberán entregarla solución escrita de los mismos.
- b) *Presentación de temas de análisis.* Se realizará de acuerdo a los artículos, libros y materiales de diversos temas orientados por el profesor. El profesor seleccionará al azar y de manera directa al(los) estudiante(s) que deberá(n) exponer el contenido de los mismos y/o dar respuesta a las preguntas que el profesor realizará relacionada con las lecturas. La calificación se determinará como el promedio de las calificaciones obtenidas.
- c) *Solución a exámenes de diagnóstico.* Se aplicarán exámenes de diagnóstico por equipo para evaluar los conocimientos adquiridos por los estudiantes en los diversos temas de finanzas en el transcurso de la

carrera, los cuales se entregarán en la sesión que corresponda para que cada equipo se reúna y le dé solución y se seleccionará al azar a aquellos que explicarán su respuesta al mismo. La calificación final de este rubro, se determinará como el promedio de las calificaciones obtenidas en estos exámenes. Todos los equipos entregarán al profesor una copia de sus soluciones, a los efectos de la calificación

- d) *Exámenes rápidos.* En cada sesión se aplicará un breve examen (de media hora) sobre los contenidos estudiados en la sesión anterior. El promedio de estos exámenes se considerará como la calificación del examen de medio semestre y del examen final de la práctica
- e) *Trabajo final en equipo.* Consistirá en el análisis bursátil de la acción de una emisora cualquiera, seleccionada por cada equipo, cotizada en la Bolsa Mexicana de Valores

MANUAL DE PRÁCTICAS

Licenciatura en Administración de Empresas
AD486 Práctica Integradora en Finanzas
Área de Formación: Prácticas Profesionales

PRÁCTICA 1 ANÁLISIS FINANCIERO DE EMPRESAS

LUGAR: Salón de clases

DURACIÓN: 12 horas

OBJETIVO: Analizar financieramente a una empresa mexicana, especialmente que cotice sus acciones en la Bolsa Mexicana de Valores, a partir de la información financiera emitida por la misma.

INTRODUCCIÓN

El análisis e interpretación de los estados financieros de las empresas es una de las funciones más importante de un directivo, especialmente para comprender los resultados financieros de las entidades a partir de la información que brinda la contabilidad, y servir ello de base para la planeación y la toma de decisiones.

PARTE I. DIAGNÓSTICO DE CONTABILIDAD Y ANÁLISIS E INTERPRETACIÓN DE ESTADOS FINANCIEROS

OBJETIVO:

El estudiante reafirmará los conocimientos adquiridos en las asignaturas de contabilidad, a partir de la solución de un diagnóstico que resolverá con su equipo de trabajo.

DURACIÓN : 3 horas

PREGUNTA 1

La contabilidad (marque con una X la respuesta correcta):

- a) Es un medio para brindar información de una actividad, de manera sistemática y resumida
- b) Tiene por objeto el control y la toma de decisiones
- c) Tiene por objeto registrar las transacciones que tienen lugar en una empresa

PREGUNTA 2

La contabilidad financiera en México es regulada por (marque con una X la respuesta correcta):

- a) El Banco de México
- b) La Secretaría de Hacienda
- c) El Instituto Mexicano de Contadores Públicos

PREGUNTA 3

Los usuarios de la contabilidad financiera pueden ser (marque con una X la respuesta correcta):

- a) Internos
- b) Externos
- c) a) y b)

PREGUNTA 4

Las características de la información financiera son:

1. Utilidad
2. Confiabilidad
3. Provisionalidad

Señale cual de las anteriores corresponden las siguientes:

- a) Es las característica por la cual el usuario acepta la información contable
- b) Significa que la contabilidad debe servir por su contenido informativo y por su oportunidad

- c) Significa que la información contable no representa hechos totalmente acabados ni terminados

PREGUNTA 5

El contenido informativo por el cual es útil la información financiera obedece a su:

1. Significación
2. Relevancia
3. Veracidad
4. Comparabilidad

Señale cual de las anteriores corresponden las siguientes:

- a) Es la cualidad de poder ser comparada con la información anterior o proyectada de la propia entidad, o de otras entidades
- b) Es la cualidad de incluir eventos realmente sucedidos y correctamente medidos
- c) Es la cualidad de representar con cantidades y palabras a la entidad y su evolución financiera
- d) Es la cualidad de seleccionar lo más importante para el usuario

PREGUNTA 6

La información contable es útil también por su oportunidad, la cual consiste en que (marque con una X la respuesta correcta):

- a) La información debe ser actualizada constantemente
- b) La información debe reflejar la “historia financiera” de la entidad
- c) La información debe estar disponible para el usuario en el momento que los requiera para tomar decisiones

PREGUNTA 7

La confiabilidad de la información contable obedece a su:

1. Estabilidad
2. Objetividad
3. Verificabilidad

Señale cual de las anteriores corresponden las siguientes:

- a) Implica que se le pueden aplicar pruebas al sistema que generó la información, y obtener los mismos resultados
- b) Significa que las reglas bajo las que opera la contabilidad no han sido distorsionadas
- c) Significa que el sistema no cambia en el tiempo y que las reglas son las mismas

PREGUNTA 8

Los principios de contabilidad son los postulados universalmente aceptados sobre los cuales se basa el ejercicio de la misma, y son:

1. Entidad
2. Realización
3. Período contable
4. Valor histórico original
5. Negocio en marcha
6. Dualidad económica
7. Revelación suficiente
8. Importancia relativa
9. Consistencia

Señale cual de las anteriores corresponden las siguientes:

- a) ____ La vida económica de la entidad está dividida en períodos convencionales a los fines contables
- b) ____ Se supone que la entidad permanece como un negocio en el mercado, excepto las entidades en liquidación
- c) ____ La información financiera debe contener de manera clara y comprensible lo necesario para emitir juicios
- d) ____ La empresa es un sujeto económico independiente en su contabilidad, respecto a sus propietarios
- e) ____ En la información financiera debe reflejarse los hechos más importantes, evitando el exceso de datos
- f) ____ Cada recurso de que dispone la entidad fue generado por terceros, quienes poseen por ello derechos e intereses sobre los bienes de la entidad
- g) ____ Cuantifica las operaciones económicas de la empresa
- h) ____ Los principios y reglas sobre los cuales se basa la contabilidad deben tener permanencia en el tiempo, para facilitar la comparabilidad
- i) ____ Los activos deben valorarse a su costo de adquisición o fabricación

PREGUNTA 9

Diga a cual de los estados financieros de la contabilidad corresponden las siguientes características:

- a) _____ Muestra las utilidades o pérdidas generadas en un período determinado
- b) _____ Muestra la situación financiera de una entidad en una fecha determinada

PREGUNTA 10

Diga si los siguientes conceptos corresponden a los activos (A), pasivos (P) o al capital contable (C):

- a) Representan las obligaciones (deudas) de la empresa
- b) Representan las inversiones de la empresa
- c) Representan los aportes de los propietarios
- d) Representan los bienes, propiedades y derechos
- e) Representan las fuentes de financiamiento empresarial

PREGUNTA 11

Señale con una X la respuesta correcta a las siguientes afirmaciones:

11.1. La ecuación básica de la contabilidad enuncia que:

- a) Activo + Pasivo = Capital
- b) Activo = Pasivo + Capital
- c) Activo + Capital = Pasivo

11.2. La ecuación ampliada de la contabilidad enuncia que:

- a) Activo + Ingresos = Pasivo + Capital + Gastos
- b) Activo + Pasivo + Gastos = Capital + Ingresos
- c) Activo + Gastos = Pasivo + Capital + Ingresos
- d) Activo + Capital + Ingresos = Pasivo + Gastos

11.3. En las cuentas de mayor (cuentas "T"):

- a) El pasivo aumenta por el "Debe" y disminuye por el "Haber"
- b) Los gastos aumentan por el "Debe" y disminuyen por el "Haber"
- c) El capital aumenta por el "Debe" y disminuye por el "Haber"
- d) Los ingresos aumentan por el "Debe" y disminuyen por el "Haber"
- e) El activo aumenta por el "Debe" y disminuye por el "Haber"

PREGUNTA 12

Señale cual de las siguientes afirmaciones significa anotar en el Debe (D) y cual en el Haber (H):

- a) Hacer un abono (abonar o acreditar) a la cuenta
- b) Hacer un cargo (cargar) a la cuenta

PREGUNTA 13

Señale cual de las siguientes afirmaciones significa que una cuenta tiene saldo acreedor (SA) y cuando un saldo deudor (SD):

- a) Suma de los cargos mayor a la suma de abonos
- b) Suma de los abonos mayor a la suma de cargos

PREGUNTA 14

De las siguientes afirmaciones, diga cuando representan un cargo (C) y cuando un abono (A):

- a) ____ Aumento de un pasivo
- b) ____ Disminución de ingreso
- c) ____ Aumento de activo
- d) ____ Disminución de capital
- e) ____ Disminución de gastos

PREGUNTA 15

Diga cuales de las siguientes cuentas tienen normalmente un saldo deudor (SD) y cuales un saldo acreedor (SA):

- a) ____ Activo
- b) ____ Pasivo
- c) ____ Capital
- d) ____ Ingresos
- e) ____ Gastos

PREGUNTA 16

Clasifique las siguientes cuentas de acuerdo a su presentación en los estados financieros, como activo (A), pasivo (P), capital (C), ingresos (I) o gastos (G):

- | | |
|--|--|
| ____ Almacén (Inventario) | ____ Documentos por cobrar |
| ____ Proveedores (Cuentas por pagar) | ____ Inversiones temporales (Valores negociables) |
| ____ IVA por acreditar (o por recuperar) | ____ Devoluciones, descuentos y rebajas sobre ventas |
| ____ Efectivo en caja y bancos | ____ Deudores diversos |
| ____ Capital social | ____ Utilidades de ejercicios anteriores |
| ____ Gastos de administración | ____ Terrenos y edificios |
| ____ Depreciación acumulada | ____ Gastos preoperativos |
| ____ Costo de ventas | ____ Maquinaria y equipo de oficina |
| ____ Clientes (Cuentas por cobrar) | ____ Salarios y sueldos por pagar |
| ____ Documentos por pagar | ____ Préstamos hipotecarios |
| ____ Gastos financieros (Intereses) | ____ Amortización acumulada de gastos preoperativos |
| ____ Dividendos por pagar | ____ Marcas y patentes |
| ____ Ventas | ____ Productos financieros |
| ____ IVA por pagar | ____ Acreedores diversos |
| ____ Gastos de ventas | ____ Crédito mercantil |
| ____ Mobiliario y equipo de oficina | ____ |

PREGUNTA 17

Marque con una X a cual de las siguientes afirmaciones corresponde el concepto de la *partida doble*:

- a) Una cuenta debe estar saldada tanto por el Debe como por el Haber
- b) El registro de un evento implica un movimiento en dos cuentas
- c) La suma de cargos debe ser igual a la suma de abonos

PREGUNTA 18

Indique los movimientos en las correspondientes cuentas, que implicarían los siguientes eventos económicos:

<i>EVENTO</i>	<i>DEBE</i>	<i>HABER</i>
1. Se constituye la compañía con la apertura de una cuenta bancaria como aportación de los socios		
2. Se recibe un préstamo bancario por diez años, y un interés del 25 % anual		
3. Compra de mobiliario y equipo de oficina, que se paga 50 % de contado, 25 % con un documento y el resto a crédito		
4. Se paga a un socio por concepto de un préstamo realizado a la empresa		
5. Se devengan los salarios del personal administrativo y de ventas		
6. Se constituye un fondo fijo de caja chica		
7. Compra a un proveedor diversas mercancías para la venta, las cuales paga un 20 % con un cheque, un 20 % mediante pagarés y el resto a crédito		
8. Se pagan salarios y sueldos del personal administrativo y de ventas		
9. Se venden mercancías a crédito las cuales tienen un		

costo del 10 % de las ventas		
10. Se paga a un proveedor		
11. Se cobra a un cliente		
12. Se realiza un préstamo a un empleado a partir del fondo fijo de caja chica		

EVALUACIÓN FINAL:

Cada respuesta correcta se calificará con 10 puntos, los cuales se sumarán y se dividirán entre el número de las respuestas que debían estar correctas

**CALIFICACION DE
LA PRÁCTICA**



**FIRMA Y NOMBRE DEL
PROFESOR:**

PARTE II. ESTUDIO DEL CASO: LA COMERCIAL, S.A. DE C.V.

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, aplicará las técnicas y herramientas del análisis financiero a un caso de estudio.

DURACIÓN : 3 horas

Se tiene la siguiente información sobre la empresa La Comercial, S.A. de C.V. para los dos últimos años:

BALANCE GENERAL		
<i>AL CIERRE DEL 31 DE DICIEMBRE</i>		
En: Pesos		
	<u>2002</u>	<u>2003</u>
Efectivo en caja y banco	150 000	160 000
Cuentas por cobrar a clientes	112 000	116 000
Almacén (inventario)	<u>200 000</u>	<u>900 000</u>
Total activos circulantes	462 000	1 176 000
Activo fijo bruto	5 080 000	3 132 000
Depreciación acumulada	52 000	54 000
Activo fijo neto	<u>5 028 000</u>	<u>3 078 000</u>
Total activos	<u>5 490 000</u>	<u>4 254 000</u>
Cuentas por pagar a proveedores	13 000	50 000
Salarios y sueldos por pagar	10 000	20 000
Otros pasivos corrientes	<u>12 000</u>	<u>9 000</u>
Total pasivos corto plazo	35 000	79 000
Pasivos a largo plazo	<u>1 200 000</u>	<u>900 000</u>
Total pasivos	1 235 000	979 000
Capital en acciones comunes (20 000 acciones en circulación)	2 000 000	2 000 000
Resultado de ejercicios anteriores	786 500	587 500
Resultado del ejercicio	<u>1 468 500</u>	<u>687 500</u>
Total capital	<u>4 255 000</u>	<u>3 275 000</u>
Total pasivos y capital	<u>5 490 000</u>	<u>4 254 000</u>

ESTADO DE RESULTADOS
DEL 1º DE ENERO AL 31 DE DICIEMBRE
 En: Pesos

	<u>2003</u>
Ingresos por ventas	4 100 000
Costo de ventas	<u>1 960 000</u>
Utilidad bruta	2 140 000
Gastos de operación	<u>470 000</u>
Utilidad en la operación	1 670 000
Gastos financieros	<u>420 000</u>
Utilidad antes de impuestos	1 250 000
Impuestos (45 %)	<u>562 500</u>
Utilidad neta después de impuestos	<u>687 500</u>

Se sabe además que las ventas se realizan a crédito en todos los casos. Las compras (todas a crédito) en el 2003 ascendieron a \$ 2 660 000. Todos los pagos (excepto a los proveedores) son realizados en efectivo dentro del propio año que se generan

Con la información anterior se solicita:

1. Partiendo del comportamiento de las razones financieras de la empresa presentado en la siguiente tabla, realice un análisis de la situación financiera de la empresa para el año 2003 utilizando las razones financieras siguientes del 2002: (2.5 puntos)

Razón circulante	13.2 veces	Razón de cobertura de intereses	23 veces
Prueba del ácido	7.49 veces	Margen bruto de utilidades	68 %
Periodo promedio de cobranzas	9 días	Margen de utilidad en operación	62 %
Periodo promedio de pago	10 días	Margen neto de utilidades	30 %
Rotación del inventario	7.25 veces	Rendimiento sobre activos	24 %
Rotación de activos totales	0.82 veces	Rendimiento sobre el capital	31 %
Razón de endeudamiento	22 %	Utilidad por acción (UPA)	\$ 66.75
Razón de apalancamiento	29 %		

2. A partir de los resultados anteriores, evalúe financieramente a la empresa en 2003 respecto a 2002 (2.5 puntos)
3. Elabore un Estado de Cambios en la Situación Financiera para 2003 con su correspondiente hoja de trabajo (2.5 puntos)
4. Elabore un Estado de Flujos e Efectivo (2.5 puntos).

**CALIFICACION DE
LA PRÁCTICA**



**FIRMA Y NOMBRE DEL
PROFESOR:**

PARTE III. ESTUDIO DEL CASO: GREENLEAF NURSERY, INC.

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, aplicará las técnicas y herramientas del análisis financiero, especialmente el método DuPont, a un caso de estudio.

DURACIÓN : 3 horas

MR. FRANKLIN FLORA, President of Greenleaf Nursery, is seriously studying the performance of his business in the recently completed fiscal year (see Exhibits I and 2). Greenleaf Nursery, organized by Mr. Flora, is five years old and is an expanding, profitable enterprise. However, some nagging questions persist. Although Mr. Flora is not dissatisfied with the enterprise's performance, he has developed no objective standard against which to gauge his intuition. Moreover, as President of Greenleaf Nursery, he recognizes that he should be spending more time on long-run policy and strategy considerations than the daily demands of the business have permitted.

Mr. Flora is convinced that he must establish some criteria against which to evaluate the performance of Greenleaf. He recalls reading of a model developed by DuPont to assist in the planning and control of that firm's operations (see Appendix). He does not know if the model has ever been applied to the nursery industry, or if there would be any merit in attempting to apply it. Nevertheless, believing that the next several years will be critical ones for his nursery, Mr. Flora decides to attempt to use the DuPont model.

Greenleaf Nursery consists of the main outlet, which includes the headquarters office, and one branch outlet opened just over a year ago. The two outlets are in suburban areas along heavily traveled streets on the opposite side of metropolitan Phoenix. Further expansion is on the drawing boards, with another branch outlet planned to open in six months in a third suburb of Phoenix.

Greenleaf stores have an open grid layout rather than a floor plan emphasizing departmentalization. This type of layout, along with the fact that both stores are leased, allows Greenleaf to have a lower investment in fixed assets.

Objectives of Greenleaf Nursery are profit of 6 percent on sales before taxes and operating expenses of not more than 25 percent of sales. Inventory turnover is expected at least six times a year. Greenleaf follows a conservative financial policy with most of its growth coming from retained earnings. Last year corporate sales totalled \$400,000. A substantial increase is expected this year.

Monthly income statements are prepared for each store. Expense norms are established from these data and given to the stores. This information gives each store manager a measure by which to judge store performance. In addition, standards developed by a trade association are used for comparison. Inventories in both stores are centrally controlled by Mr. Flora.

Greenleaf stores have an open grid layout rather than a floor plan emphasizing departmentalization. This type of layout, along with the fact that both stores are leased, allows Greenleaf to have a lower investment in fixed assets.

Objectives of Greenleaf Nursery are profit of 6 percent on sales before taxes and operating expenses of not more than 25 percent of sales. Inventory turnover is expected at least six times a year. Greenleaf follows a conservative financial policy with most of its growth coming from retained earnings. Last year corporate sales totalled \$400,000. A substantial increase is expected this year.

Monthly income statements are prepared for each store. Expense norms are established from these data and given to the stores. This information gives each store manager a measure by which to judge store performance. In addition, standards developed by a trade association are used for comparison. Inventories in both stores are centrally controlled by Mr. Flora.

Greenleaf offers a wide variety of services to its customers. Both stores are open Monday through Saturday with evening hours every Thursday. Bank credit cards are accepted, and Greenleaf carries its own charge accounts for long-time customers. Free delivery is offered on purchases of \$25 or more.

It is the policy of Greenleaf Nursery to employ competent individuals who will be able to advise gardeners as well as sell products. Mr. Flora believes that both regular and first-time customers deserve knowledgeable, courteous help. Each Greenleaf store has a training program for its new employees. The two stores have a total of six full-time and five part-time employees in addition to Mr. Flora. Employees are encouraged to work toward Arizona Certified Nurserymen standing. Time permitting, Mr. Flora also arranges training sessions for employees on exceptional lines-new merchandise, slow-selling lines, or high-volume seasonal items.

Greenleaf managers are expected to participate in community affairs and to be conscious of projecting the proper Greenleaf image. Mr. Flora and the managers of his two outlets accept all invitations to speak at local gardening groups and sometimes provide Greenleaf merchandise for door prizes.

Greenleaf Nursery believes in providing quality merchandise combined with a fair price and substantial customer service. Mr. Flora views his business as environmental planning for Phoenix-area residents. He believes retail sales and profits will naturally improve if he consistently provides effective environmental planning for all customers. In order to appeal to different market segments, Greenleaf strives to have the largest

selection in the metropolitan area of green goods and shelf goods in both high- and low-priced lines. Greenleaf also carries an assortment of small ticket shelf goods. Most of the name brands in shelf goods-such as Ortho, Charles Lilly, Capitol, Fertilome, and Northrup King-are carried. Mr. Flora is considering the possibility of developing a line of generic shelf goods for which there are several potential suppliers.

EXHIBIT I

Greenleaf Nursery, Inc. Balance Sheet as of June 30, 1981

<hr/> <p>Current assets</p> <p>Cash \$ 5,000</p> <p>Inventory 120,000</p> <p>Accounts receivable <u>20,000</u></p> <p>Total current assets \$145,000</p> <p>Fixed assets, net <u>55,000</u></p> <p>Total assets \$200,000</p>	<p>Current liabilities</p> <p>Accounts payable \$ 25,000</p> <p>Notes payable <u>20,000</u></p> <p>Total current liabilities \$45,000</p> <p>Long-term liabilities 65,000</p> <p>Total liabilities \$ 110,000</p> <p>Net worth</p> <p>Common stock \$ 30,000</p> <p>Retained earnings <u>60,000</u></p> <p>Total net worth \$ 90,000</p> <p>Total liabilities and net worth <u>\$200,000</u></p> <hr/>
---	--

Merchandise ranges from mass-appeal items such as annual bedding plants and citrus trees to limited-appeal items such as bromeliad plants and Agri-mycin 17. Prices range from thirty-nine cents to \$1,000 and from seed packets to specimen landscape material. Of Greenleaf's sales, 35 percent is in nursery stock, 30 percent in garden supplies, 15 percent in bedding plants, and 20 percent in the mixed category of greenhouse and pottery items.

Fair price is an important objective of Greenleaf Nursery. Markups are usually below suggested retail prices but above the prices offered by discount-price nurseries. Greenleaf ordinarily uses a 55 percent retail markup on nursery stock, 45 percent on garden supplies, and 50 percent on bedding plants, greenhouse, and pottery items.

Newspaper advertising is Greenleaf's only nonpersonal promotion medium except for flyers mailed occasionally to charge customers. The newspaper ads are designed by Mr. Flora with suggestions provided by store managers. The ads are primarily institutional in nature. They stress Greenleaf's variety of merchandise

EXHIBIT 2

Greenleaf Nursery, Inc.
Income Statement for Year Ended June 30, 1981

Sales		\$400,000
Less cost of goods sold		<u>200,000</u>
Gross profit		\$200,000
Expenses		
Advertising	\$ 5,000	
Purchasing costs	8,000	
Credit service	7,000	
Delivery service	2,000	
Insurance and taxes	16,000	
Loan interest	5,000	
Miscellaneous	6,000	
Management salaries	30,000	
Personnel salaries	40,000	
Rent	16,000	
Depreciation	4,000	
Supplies	40,000	
Utilities	<u>8,000</u>	
Total expenses		<u>\$187,000</u>
Profit before taxes		\$ 13,000
Income taxes (at 17 percent)		<u>2,200</u>
Net profit		<u>\$ 10,800</u>

and services along with fair prices, or they provide seasonal gardening tips and product suggestions. To generate traffic in the stores, three-day sales featuring about two dozen specially priced items are held at the beginning of each major selling season. Newspaper ads twice the size of Greenleaf's usual ads are used to promote the sales.

Mr. Flora wishes to improve the performance of Greenleaf Nursery, Inc. He is concerned with questions such as: Where should he begin? What are the opportunities? What should be the goals for the business and by what strategies may they be obtained?

EXHIBIT 3

Greenleaf Nursery, Inc.
Industry Median Data for Retail Nurseries

Current ratio	2.4 X
Profit before taxes/Sales	6.6%

Net Sales/Inventory	8.0 X
Net Profits/Net Worth	15.0%
Total Debt/Net Worth	70.0%

QUESTIONS

1. Using the DuPont model, determine Greenleaf's return on net worth performance for fiscal 1981. (2.5 puntos)
2. Considering the needs of the enterprise, is last year's return on net worth sufficient? If not, what would you consider a satisfactory return? (2.5 puntos)
3. Discuss possible improvements in the following areas, taking into account the objectives of the enterprise and its tentative marketing strategies: (2.5 puntos)
 - a. Margin management
 - b. Asset management
 - c. Financial management
4. What are some of Mr. Flora's present marketing strategies that might be examined with the goal of increasing profitability? (2.5 puntos)

**CALIFICACION DE
LA PRÁCTICA**

**FIRMA Y NOMBRE DEL
PROFESOR:**

PARTE IV. ANÁLISIS FINANCIERO DE UNA EMPRESA REAL

OBJETIVO:

El estudiante analizará financieramente, en el marco de su equipo de trabajo, una sociedad anónima de la práctica económica mexicana, específicamente que cotice sus acciones en la Bolsa Mexicana de Valores.

DURACIÓN : 3 horas

La práctica se desarrollará siguiendo cada equipo el procedimiento general siguiente:

1. Deberá buscar en el Internet y en las revistas y periódicos, información de los estados financieros auditados para tres años de una empresa real de la economía mexicana, en especial, una empresa que cotice en la Bolsa Mexicana de Valores
2. Deberá evaluar financieramente los estados financieros de esa empresa, empleando las técnicas de análisis e interpretación de estados financieros, específicamente la de porcentos integrales, razones financieras, tendencias y elaboración del estado de cambios en la situación financiera.
3. Tendrá una hora para presentar sus resultados, del cual deberá entregar una copia escrita al profesor, sobre la siguiente base:
 - a) Empresa seleccionada
 - b) Sector / ramo de la economía al cual pertenece
 - c) Productos o servicios que ofrece
 - d) Breve reseña histórica
 - e) Principal directivo actual
 - f) Estados financieros auditados
 - g) Análisis de los estados financieros

Los aspectos a evaluar a cada equipo será: (cada aspecto equivaldrá a 2 puntos)

1. Evaluación financiera de la empresa
2. Integración mostrada como equipo
3. Calidad de la presentación y claridad en la exposición de las ideas
4. Precisión en las respuestas a las preguntas efectuadas
5. Validez del análisis efectuado y de las conclusiones y juicios emitidos

**CALIFICACION DE
LA PRÁCTICA**

An empty rectangular box with a black border, intended for the student's grade or score.

**FIRMA Y NOMBRE DEL
PROFESOR:**

MANUAL DE PRÁCTICAS

Licenciatura en Administración de Empresas
AD486 Práctica Integradora en Finanzas
Área de Formación: Prácticas Profesionales

PRÁCTICA 2 ELABORACIÓN DE PROYECCIONES Y PLANES FINANCIEROS DE EMPRESAS

LUGAR: Salón de clases

DURACIÓN: 9 horas

OBJETIVO: El alumno elaborará los estados financieros proforma de las empresas

INTRODUCCIÓN

Una de las principales actividades de los directivos financieros lo constituye la planeación financiera, la cual sintetiza las proyecciones realizadas por la entidad para su actividad económica. La planeación financiera se materializa principalmente en los estados financieros pro forma (esto es, el estado de resultados pro forma y el balance general pro forma), así como en el presupuesto de efectivo.

PARTE I. ELABORACIÓN DE ESTADOS FINANCIEROS PROFORMA A PARTIR DE RAZONES FINANCIERAS

OBJETIVO:

El estudiante, con su equipo de trabajo, elaborará los estados financieros pro forma a partir de las razones financieras, a través de la solución de un caso de estudio

DURACIÓN : 3 horas

LA COMERCIALIZADORA, S.A. DE C.V.

Con los siguientes datos presupuestados, se pide completar el balance general pro forma y el estado de resultados pro forma que aparecen más abajo:

Compras: \$ 1 200 000
Razón circulante: 4 veces
Período Promedio de Cobranzas: 18 días
Período Promedio de Pago: 18 días
Rotación de inventarios: 12 veces
Rotación de activos fijos brutos: 1.6 veces
Rotación de activos totales: 1.25 veces
Razón de endeudamiento: 25 %
Razón de cobertura de intereses: 1.46 veces
Margen de utilidad bruta: 75 %
Margen de utilidad en la operación: 73 %
Valor nominal de las acciones: \$ 20.00 / acción
Acciones en circulación: 10 000
Año: 360 días

ESTADO DE RESULTADOS

(en pesos)

Ventas	2 400 000
Costo de ventas	
Utilidad bruta	
Gastos de operación	
Utilidad en la operación	
Intereses	
Utilidad antes de impuestos	
Impuestos (35 %)	
Utilidad neta después de impuestos	

BALANCE GENERAL

(en pesos)

ACTIVOS		
Efectivo		
Cuentas por cobrar		
Inventarios		
Activos circulantes totales		
Activo fijo bruto		
Depreciación acumulada		200 000
Activo fijo neto		
Activos totales		
PASIVOS Y CAPITAL		
Cuentas por pagar		
Otros pasivos de corto plazo		
Pasivos de corto plazo totales		
Pasivos a largo plazo		
Pasivos totales		
Capital social en acciones		
Utilidades retenidas de ejercicios anteriores		
Utilidades retenidas del ejercicio		
Capital total		
Pasivos y Capital totales		

**CALIFICACION DE
LA PRÁCTICA**

**FIRMA Y NOMBRE DEL
PROFESOR:**

PARTE II. ESTUDIO DEL CASO: THE COLLEGIATE CORNER (3 hrs.)

The Collegiate Corner was established in 1977 by Mr. and Mrs. Ralph Jordan in a university town of 45,000. Mrs and Mr. Jordan acted as buyer and general manager of the shop. Mr. Jordan, who was a stockbroker, took relatively little part in managing the enterprise except for general advice and assistance. The store' s retail lines consisted of casual clothing which appealed to young men and women from fifteen to twenty-five.

Competition was keen in the clothing market. However, the Collegiate Corner' s merchandise included well-known lines, and the shop was located in a shopping center convenient for students from the nearby university. The shop soon became popular for the latest fad items as well as long-time favorite casual clothing. Prices were competitive with other shops and department stores in the community.

Mrs. Jordan worked in the shop along with a full-time sales clerk. Part-time student help was used during seasonal high-volume sales periods or when Mrs. Jordan was out of town on buying trips. Mr. Jordan handled some of the paperworks of the business. A public accounting firm prepared the shop' s tax returns.

At the end of April 1981 Mrs. Jordan was planning her sales program in detail for the last eight months of the year including the back-to-school promotion for September and the December holidays' sale. To finance inventory requirements over the past 3½ years the Jordans has relied on the First National Bank for loans. These seasonal borrowings had been repaid at the end of the selling season.

In preparing for a discussion with her banker regarding credit needs in the last eight months of 1981 Mrs. Jordan collected the information for a cash budget based on cash receipts and disbursements. Mrs. Jordan estimated sales for the remainder of the current year as given in Exhibit 1, based on prior years' trends and her assessment of the economic picture in the community.

EXHIBIT 1

Sales Estimates for Last Eight Months of 1981

May	\$11,000
June	9,000
July	7,000
August	14,000
September	19,000
October	14,000
November	13,000
December	18,000

Approximately 80 percent of the shop's sales are paid in cash or with bank credit cards. Mrs. Jordan's sales estimates already reflect the discount charge made by the banks for bank credit card sales. The remaining 20 percent of sales are made to established credit customers on thirty-day charge accounts. For planning purposes Mrs. Jordan calculates that 70 percent of the shop's charge accounts will be paid the month following sale with the remaining 30 percent being paid the second month following sale. Bad debt losses from the shop's charge customers have been so small that they are ignored for planning purposes. Customers accounts receivable at the end of April 1981 amounted to \$ 3,000. It was expected that \$ 2,000 of this amount would be collected in May and \$ 1,000 would be collected in June.

The shop's bank balance was \$ 2,000 at the end of April. The Jordans considered this to be the minimum level of cash necessary to meet unexpected needs.

The Collegiate Corner's purchases of merchandise are generally made on terms of 3/15 net 45. The Jordans make every effort to take all cash discounts for prompt payment of purchase invoices. For planning purposes it is assumed that purchases are made evenly throughout the month. Exhibit 2 shows the estimated purchases by the Collegiate Corner for the last nine months of 1981.

EXHIBIT 2
Estimates Purchases of Merchandise

1981	Gross Purchase Invoice
April (actual)	\$6,000
May (planned)	7,000
June	14,000
July	9,000
August	6,000
September	10,000
October	3,000
November	2,000
December	8,000

Wages and Mrs. Jordan's proprietor's drawings were estimated at \$ 2,200 a month except during September and December when a part-time sales person will be employed, adding approximately \$ 700 to wage payments in each of these two months.

Rent and utilities were expected to average \$ 1,000 monthly. The projected advertising schedule for the clothing store for the last months of 1981 is shown in Exhibit 3. Advertising expenses are paid the month following the schedule run.

EXHIBIT 3

Advertising Schedule, Last Nine Months of 1981

April	\$200	September	500
May	400	October	300
June	200	November	500
July	200	December	600
August	400		

The Jordans planned to make tax payments of approximately \$ 1,500 each in June and September from store funds. Furthermore, Mrs. Jordan estimated miscellaneous cash payments each month would average \$ 500 for items such as supplies, minor repairs, buying trips, and contributions.

After gathering these data, Mrs. Jordan was ready to prepare a cash budget forecast to present to the First National Bank loan officer with her request for short-term credit for remainder of the year.

QUESTIONS

1. Prepare a cash budget forecast of receipts and disbursements from the information assembled by Mrs. Jordan. (0.2 puntos)
2. What is the maximum amount of bank credit required assuming that any cash shortage will have to come from bank loans since there is no excess cash in the enterprise's bank account? (0.2 puntos)
3. When will the need for the maximum amount of the funds arise? (0.2 puntos)
4. When, if at all during the eight-month period, will the Collegiate Corner be able to get out of debt to the bank and still maintain its minimum \$ 2,000 cash balance? (0.2 puntos)
5. If you were a bank loan officer, what information would you want in addition to the cash forecast prepared for this case? Would you extend credit to this enterprise? (0.2 puntos)

CALIFICACION DE LA PRÁCTICA

FIRMA Y NOMBRE DEL
PROFESOR:

MANUAL DE PRÁCTICAS

Licenciatura en Administración de Empresas
AD486 Práctica Integradora en Finanzas
Área de Formación: Prácticas Profesionales

PRÁCTICA 3 FORMULACIÓN Y EVALUACIÓN DE PROYECTOS DE INVERSIÓN

LUGAR: Salón de clases

DURACIÓN: 9 horas

OBJETIVO: Tomar decisiones en diversos casos relacionados con la evaluación financiera de proyectos de inversión

INTRODUCCIÓN

Una de las decisiones estratégicas de las finanzas es la constituida con la evaluación financiera de los proyectos de inversión, al involucrar la adquisición de activos fijos. Esta evaluación implica la proyección de los flujos de efectivo, la definición de la tasa de descuento mínima aceptable, la aplicación de criterios o métodos para determinar la viabilidad financiera del proyecto, así como el análisis del riesgo asociado al mismo.

PARTE I. ESTUDIO DEL CASO: TECNOLOGÍA DE CÓMPUTO, S.A. DE C.V.

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, evaluará financieramente un proyecto de inversión

DURACIÓN : 3 horas

La empresa Tecnología de Cómputo, S.A. de C.V. está evaluando el desarrollo de un nuevo dispositivo para el control computarizado de energía eléctrica. Según estimaciones de estudio de mercado, se considera que las ventas anuales serán de 25 000 unidades a un precio calculado para el momento del inicio de operaciones de \$ 2 200 cada una.

La empresa requiere de una nueva planta para llevar a cabo lo anterior, la cual será construida y estará lista para operar a partir del año 2002. La planta requerirá un terreno que le costará \$ 1 200 000, y que adquirirá y pagará a finales de 1999. La construcción del edificio comenzaría a principios del año 2000 y continuaría a lo largo del 2001. La edificación costaría \$ 8 400 000 y se depreciaría en línea recta considerando un valor residual contable de \$ 2 400 000, y los pagos por su construcción se realizarían en partes iguales al finalizar los años 2000 y 2001.

El equipo requerido por el proyecto sería adquirido e instalado a fines de 2001, y se pagarían los \$ 12 000 000 que cuesta su compra y puesta en marcha, al finalizar ese año, depreciándose también en línea recta sin preverse valor residual.

El proyecto requerirá una inversión inicial en capital de trabajo a fines de 2001 igual al 12 % de las ventas estimadas para el primer año, y a partir del inicio de su operación, se consideraría para el 31 de diciembre de cada año un incremento en capital neto de trabajo igual al 12 % de cualquier incremento esperado en las ventas para el año siguiente.

La vida económica estimada para el proyecto es de 6 años, y se espera que en el último año, el terreno tenga un valor de mercado de \$ 1 700 000, el edificio de \$ 1 000 000 y el equipo de \$ 1 500 000. Dado que la planta iniciaría su operación el 1º de enero del año 2002, el primer flujo de efectivo debe ser considerado al finalizar ese año, y este principio será válido para la proyección de los subsecuentes flujos de efectivo.

El departamento de producción ha estimado que los costos de producción variables sean de un 65 % de los ingresos por ventas, y los costos fijos generales de \$ 8 000 000. Las ventas y los costos fijos, excluyendo la depreciación, se proyecta que se incrementen con la inflación, para la cual se ha proyectado una tasa promedio del 6 % anual durante la vida útil del proyecto.

Si la tasa fiscal gravable a la empresa es del 45 %, y la misma tiene un costo de capital del 10 %. La prima por riesgo del proyecto se ha estimado en 2%.

- a) Elabore la proyección de flujos de efectivo para el proyecto que se desea evaluar (5 puntos)
- b) Calcule, considerando el riesgo del proyecto:
 - b1) Valor presente neto (1 punto)
 - b2) Tasa interna de rendimiento (1 punto)
 - b3) Índice de rentabilidad (1 punto)
 - b4) Período de recuperación de la inversión (1 punto)
 - b5) Período de recuperación de la inversión descontado (1 punto)

**CALIFICACION DE
LA PRÁCTICA**

**FIRMA Y NOMBRE DEL
PROFESOR:**

PARTE II. ESTUDIO DE UN CASO REAL DE EVALUACIÓN DE PROYECTOS DE INVERSIÓN

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, analizará y enjuiciará la evaluación realizada a un proyecto de inversión real

DURACIÓN : 3 horas

PROCEDIMIENTO GENERAL

El profesor distribuirá previamente a la sesión de Práctica, diferentes proyectos de inversión que ya hayan sido evaluados, los cuales podrán estar constituidos por Tesis de Grado presentadas o por Trabajos Finales entregados en la asignatura Formulación y Evaluación de Proyectos de Inversión, a los efectos que sean discutidos por cada equipo, que deberá analizar la evaluación que se realizó en su momento sobre ese proyecto, y emitirá un juicio crítico sobre los aspectos positivos y negativos observados en ese proceso de evaluación. Los aspectos a analizar serán:

1. Estudio de mercado
2. Estudio técnico
3. Estudio económico - financiero

Los aspectos a evaluar a cada equipo será: (cada aspecto equivaldrá a 2 puntos)

1. Calidad del juicio emitido (aspectos positivos y negativos señalados)
2. Calidad de las propuestas efectuadas a la para la evaluación del proyecto
3. Integración mostrada como equipo
4. Calidad de la presentación y claridad en la exposición de las ideas
5. Precisión en las respuestas a las preguntas efectuadas

CALIFICACION DE LA PRÁCTICA



**FIRMA Y NOMBRE DEL
PROFESOR:**

MANUAL DE PRÁCTICAS

Licenciatura en Administración de Empresas
AD486 Práctica Integradora en Finanzas
Área de Formación: Prácticas Profesionales

PRÁCTICA 4 ADMINISTRACIÓN DEL CAPITAL DE TRABAJO

LUGAR: Salón de clases

DURACIÓN: 9 horas

OBJETIVO: Tomar decisiones relacionadas con la administración de capital de trabajo y sus elementos integrantes

INTRODUCCIÓN

La administración del capital de trabajo conforman las finanzas operativas o de corto plazo de la empresa, estando integradas por las decisiones financieras relacionadas con los activos circulantes y los pasivos corrientes de la entidad. Su importancia reside precisamente en ser la actividad financiera cotidiana a la cual se enfrenta un administrador financiero.

PARTE I. ESTUDIO DEL CASO: VISTA WORLD, INC.

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, evaluará financieramente políticas alternativas de capital de trabajo

DURACIÓN : 3 horas

Vista World, hc. manufactured major home appliances such as gas and electric ranges, refrigerators, freezers, trash compactors, waste disposals, and dishwashers. The firm was founded by Zachary Hester in 1956 near Fort Pierce, Florida, to supply components to the housing industry. Although growth was slow the first few years, sales had climbed to \$30,000,000 by 1974. Since Mr. Hester was approaching retirement, he wanted to diversify his asset holdings. To do this, he needed to find a buyer for the company. Balance sheets and an operations statement are included as Exhibit 9.1 and Exhibit 9.2.

In 1975, Controlls, Inc., a large conglomerate specializing in industrial heating and air conditioning, bought Vista World, adding it as a division. The arrangement did not prove to be economically sound. In 1977, the Vista World Division was sold to a group of investors, who immediately sold stock to the general public. The decision was then made to sell appliances to the home consumer market. By 1982, Vista World was established as a significant force, especially in the Sun Belt area of the country.

Dorotbea Jackson, vice-president for finance, had just completed a stormy meeting with Zane Hill, vice-president for marketing, and Samuel Licante, vice-president for production. These corporate officers were responsible for production. These corporate officers were responsible for formulation of a policy that covered working capital assets: cash, marketable securities, accounts receivable, inventory, and prepaids, along with the financing of those assets. Going into the meeting, Ms. Jackson was aware of different viewpoints among the three vice-presidents, but she felt any disagreements could be resolved with a minimum of difficulty. She was clearly wrong.

Ms. Jackson realized it was important to understand the viewpoints of Mr. Hill and Mr. Licante and to improve her own knowledge of working capital management. To accomplish this, she authorized a meeting in which her staff assistants, Jarvis Levine, Sally Haas, and Selma Haydn, would present the arguments of the three vice-presidents. Mr. Levine was fue surrogate for Mr. Hill and would present the case for aggressive working capital management. Ms. Haas represented Ms. Jackson and

would explain why a conservative approach would be best. Ms. Haydn took the position of Mr. Licante and demonstrated why a middle-of-the-road approach was sound. To this end, Ms. Jackson prepared Exhibit 9.3, which provided parameters for aggressive, middle-of-the road, and conservative working capital policies. It also provided interest rate data for those policies.

The working capital policy of Vista World applied to the composition of the current assets and to the manner in which they were to be financed. Any working capital position, be it aggressive, conservative, or middle-of-the-road, should be explained not only in terms of working capital, but also in terms of how it might impact other areas of the firm. For fiscal 1988 (July 1987-June 1988), Ms. Jackson told the preparers that total assets would be estimated at \$180,000,000 and that earnings before interest and taxes would be estimated at \$22,000,000.

Selected ratios for household electric appliance manufacturers are presented in Exhibit 9.4.

EXHIBIT 9.1
Vista World, Inc.

Condensed Balance Sheets as of June 30 (In Millions)

	1986	1987
<i>Assets:</i>		
Cash and Neat-Cash Items	\$ 12	\$ 12
Accounts Receivable, Net	51	55
Inventory	63	66
Other Current Assets	2	2
Total Current Assets	<u>\$128</u>	<u>\$135</u>
Net Fixed Assets	41	40
Other Assets	1	1
Total Assets	<u>\$170</u>	<u>\$176</u>
 <i>Liabilities and Stockholders' Equity:</i>		
Trade Accounts Payable	\$ 20	\$ 21
Notes Payable to Banks	6	6
Product Warranty	7	7
Current Maturity, Long-Term Debt	2	2
Accruals and Other	9	9
Total Current Liabilities	<u>\$44</u>	<u>\$ 48</u>
Long- Term Debt, Less Current Maturity	43	41
Stockholders' Equity		
Preferred Stock	18	18
Common Equity	65	72
Total Stockholders' Equity	<u>\$ 83</u>	<u>\$90</u>
Total Liabilities and Stockholders'	<u>\$170</u>	<u>\$176</u>

Equity

=====
=====

EXHIBIT 9.2
Vista World, Inc.

*Condensed Operations Statement for the Year Ending
June 30, 1987 (In Millions)*

Net Sales	\$340
Cost of Goods Sold	<u>282</u>
Gross Profit	\$ 58
Operating Expenses	
Marketing and Administrative	<u>29</u>
Operating Income	\$ 29
Interest Expense	<u>5</u>
Income Before Taxes	\$ 24
Federal and State Income Taxes	<u>8</u>
Net Income	<u>\$ 16</u>
Preferred Dividends	\$ 2
Earnings Available to Common Shareholders	\$ 14
Common Dividends	\$ 7

EXHIBIT 9.3
Vista World, Inc.

Information for the Preparation of Working Capital Policies

<i>Policy</i>	<i>Current Assets / Total Assets</i>	<i>Current Liabilities / Total Claims</i>	<i>[Interest Rate on Debt</i>
Aggressive	0.40 to 0.50	0.50 to 0.60	12%
Middle of the road	0.50 to 0.60	0.40 to 0.50	11
Conservative	0.60 to 0.70	0.30 to 0.40	10

EXHIBIT 9.4
Vista World, Inc.

*Selected Ratios for Household Electric Appliance
Manufacturers for the Following Calendar Periods*

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
<i>Liquidity:</i>				
1. Current Ratio	1.9	1.8	1.9	2.4
2. Acid Test	0.8	0.9	0.9	1.1
3. Current Assets / Total Assets (%)	71.9	71.9	73.3	73.2
<i>Activity:</i>				
4. Receivables Turnover	7.9	6.8	7.7	7.4
5. Cost of Goods Sold/Inventory	3.9	4.1	3.8	3.7
6. Net Sales / Net Working Capital	6.7	6.3	5.5	5.2
7. Net Sales / Total Assets	2.1	1.8	2.0	1.8
<i>Leverage:</i>				
8. Total Debt / Total Assets (%)	40.0	40.5	41.0	44.3
9. Debt / Net Working Capital	1.6	1.4	1.2	1.3
10. EBIT / interest	4.2	4.2	3.8	2.4
<i>Profitability:</i>				
11. COGS / Net Sales (%)	73.4	71.6	72.5	68.8
12. Operating Profit / Net Sales (%)	6.7	8.1	7.6	6.6
13. Profit Before Taxes / Net Sales (%)	5.5	6.8	5.6	4.9
14. Profit Before Taxes / Total Assets (%)	10.1	10.8	12.0	9.1
15. Profit Before Taxes / Net Worth (%)	26.1	28.1	25.6	26.1

QUESTIONS

1. Prepare the case for an aggressive approach to working capital policy for fiscal 1988 from the point of view of Mr. Levine.
2. Prepare the case for a middle-of-the-road approach to working capital policy for fiscal 1988 from the point of view of Ms. Haydn.
3. Prepare the case for a conservative approach to working capital policy for fiscal 1988 from the point of view of Ms. Haas.
4. Choose an appropriate working capital policy for Vista World. (Be prepared to

explain what factors are significant in making your choice.)

**CALIFICACION DE
LA PRÁCTICA**



**FIRMA Y NOMBRE DEL
PROFESOR:**

PARTE II. ESTUDIO DEL CASO: BAXTER FURNITURE COMPANY

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, evaluará financieramente políticas alternativas de capital de trabajo

DURACIÓN : 3 horas

Baxter Furniture is a medium-sized manufacturer of metal file cabinets for home and office use. The company sells its office furniture through regular channels, but its home products are sold through mass merchandisers such as Wal-Mart under the trade name "Office Friends." Sales of both lines have grown substantially over the past 20 years because of the increasing demand for storage containers. Because the demand for paper storage appears to be slowing, Baxter has recently moved into the manufacture and distribution of computer tape and diskette storage systems, which it believes to be the "hot" growth area of the future.

Although the firm has always been up to date in manufacturing and marketing, financial management has tended to take a back seat. In fact, the recently retired chief financial officer (CFO) joined the company right out of high school, and he worked his way up from an initial position of mail clerk. To revitalize the finance function, the company brought in Tony Santini, who has an MBA and who had worked as treasurer for several years at a competing company, as CFO.

After spending several weeks familiarizing himself with Baxter's operations, Santini concluded that one of his first tasks should be the development of a rational working capital policy. With this in mind, he decided to examine three alternative policies: (1) an *aggressive* policy, which calls for minimizing the amount of cash and inventories held, and for using only short-term debt; (2) a *conservative* policy, which calls for holding relatively large amounts of cash and inventories, and for using only long-term debt; and

Table 2
Estimated Sales Under Each Working Capital Policy

<u>Economy</u>	<u>Working Capital Policy</u>		
	<u>Aggressive</u>	<u>Moderate</u>	<u>Conservative</u>
Weak	\$ 9,000,000	\$11,000,000	\$13,000,000
Average	12,000,000	13,000,000	14,000,000
Strong	13,000,000	14,500,000	16,000,000

(3) a *moderate* policy, which falls between the two regardless of which working capital policy is adopted, fixed costs are likely to be a function of the level of current assets held—the greater the level of current assets, the greater the fixed costs. This situation results primarily from the need to hold the larger inventories in high-cost, dehumidified warehouses, and because of higher insurance costs. Santini estimates annual fixed costs to be \$4,000,000 under the aggressive policy, \$4,500,000 under the moderate policy, and \$5,000,000 with the conservative policy. Baxter's federal-plus-state tax rate is 40 percent.

Working capital policy will also affect the firm's ability to respond to varying economic conditions. In an average economy, Baxter's sales would be highest if the firm used a conservative policy. Here the firm's inventories would be the highest, so it could respond immediately to incoming orders and hence not risk losing sales because of stockouts. Baxter's cash and marketable securities would also be highest under a conservative policy. Further, if higher sales occurred because of the conservative policy, then accounts receivable would also be higher, even if credit standards and credit terms were not changed.¹ Conversely, expected sales are lowest under an aggressive policy. Here the firm would have low cash and inventory levels, and hence some sales would be lost, which would depress the level of receivables.

The different policies would also cause sales to react differently to changing economic conditions. In a strong economy, the conservative approach with its higher inventories would be best for generating increased sales. On the other hand, an aggressive policy would inhibit the firm from responding to increased demand. Table 2 contains Santini's best estimates of the sales levels under the alternative policies for three different states of the economy.

Note that working capital policy actually consists of two independent decisions: (1) the level of current assets, and (2) the way in which the current assets are financed. In this case, to simplify the numerical analysis, the two independent decisions are treated as dependent. Thus, a conservative policy implies a conservative financing policy, along with large holdings of current assets. Similarly, an aggressive policy signifies a heavy use of short-term debt along with relatively small holdings of current assets.

With these estimates in mind, Santini must now draft a report to present to Jim Jackson and Baxter's board of directors. Assume that you are Santini's assistant, and he has asked you to help him prepare the report. To help you get started, Santini has generated the following list of questions. Your task now is to answer them, after which you must help Santini prepare the final report. Since you were hired by the previous CFO, you know that Santini does not have too much confidence in your knowledge or ability. This assignment will give you a chance to prove your worth—in effect, your performance will start you on the path to the top, or out the door, so you really need to get it right.

Questions

1. The two most basic decisions concerning working capital policy relate to the level of current assets and the manner in which current assets are financed. Explain the differences between aggressive, moderate, and conservative working capital policies in these two areas.

2. Tony Santini has expressed some doubts as to how to characterize accounts receivable in terms of conservative, moderate, or aggressive working capital policies. Obviously, the higher the level of sales, the higher the level of accounts receivable will be. On the other hand, if the firm takes deliberate actions which raise the level of receivables as a percentage of sales, would you characterize those actions as aggressive or conservative? Clearly, if the company takes the action of keeping more cash or inventories on hand, that is a conservative action, but is an action which raises receivables conservative? Explain.

3. Construct pro forma income statements for each working capital policy under an average economy, a weak economy, and a strong economy. Then, use these data to calculate ROEs and basic earning power ratios (EBIT /Total assets). (Table 3 provides a partially completed worksheet.) How could these data be used to help decide on the optimal working capital policy? Could you choose a working capital policy on the basis of the information generated thus far?

4. Assume that there is a 50 percent chance of an average economy, a 25 percent chance of a weak economy, and a 25 percent chance of a strong economy. What is the expected ROE under each policy? How do the policies compare in terms of relative riskiness? (Hint: Riskiness can be expressed in terms of standard deviation and coefficient of variation.)

5. Now assume that the Federal Reserve, reacting to increasing inflationary pressures, tightens monetary policy shortly after Baxter has made its working capital policy decision. Any long-term debt outstanding would be locked in at 13 percent, but Baxter would have to roll over any short-term debt outstanding at the new rate, which has skyrocketed to 15 percent. Assuming an average economy, what would be the resulting ROE under each policy? Do these results affect your previous conclusions about the relative riskiness of the three alternatives?

6. Like most companies of its size, Baxter has two primary sources of short-term debt: trade credit and bank loans. One supplier, which furnishes Baxter with \$500,000 (gross) of materials a year, offers terms of 3/10, net 60.

- a. What are Baxter's net daily purchases from this supplier? (Use a 360-day year.)
- b. What is the average level of Baxter's accounts payable to this supplier, assuming the discount is taken? What is the average payables balance if the discount is not taken? What are the dollar amounts of free credit and costly credit from this supplier?

- c. What is the approximate percentage cost of the costly credit? What is the effective annual percentage cost?
- d. What conclusions do you reach from this analysis?

7. In discussing a possible loan with the firm's banker, Santini learned that the bank would be willing to lend Baxter up to \$5,000,000 for one year at a 10 percent nominal, or stated, rate. However, Santini failed to ask the banker about the specific terms of the loan. Assume that Baxter will borrow \$2,500,000.

a. What would the effective interest rate be on the loan if it was a simple interest loan? If the banker offered to lend the money for 6 months, but with a guaranteed renewal at the same 10 percent simple interest rate, would this be as good as, better than, or worse than a straight one-year loan at 10 percent simple interest? Explain.

b. What would be the effective interest rate if the loan was a discount loan? What face amount would be needed to provide Baxter with \$2,500,000 of available funds?

c. Assume now that the loan terms call for an installment loan with add-on interest and 12 equal monthly payments, with the first payment due at the end of the first month. What would be Baxter's monthly payments? What would be the approximate percentage cost of this loan? What would be its effective annual rate? Would this type of loan be suitable if Baxter needs all of the money for the entire year? What type of asset is most suitably financed by an installment-type loan?

d. Now assume that the bank charges simple interest, but it requires a 20 percent compensating balance.

(1) Suppose Baxter does not carry any cash balances at that bank. How much would the firm have to borrow to obtain the needed \$2,500,000 while meeting its compensating balance requirement? What is the effective annual percentage rate on this loan?

(2) Now suppose Baxter currently carries an average cash balance of \$75,000 at the bank, and that those funds can be used as a part of the compensating balance requirement. What effect does this have on the amount borrowed, and on the effective cost of the loan?

(3) Return to the scenario in which Baxter currently maintains its working cash balances in another bank. Now assume that the bank from which Baxter would borrow pays 5 percent simple interest on all checking account balances. What would be the effective percentage cost of the loan in this situation?

e. Finally, assume that the bank charges discount interest, and it also requires a 20 percent compensating balance. How much would Baxter have to borrow, and what would be the effective interest rate under these conditions?

8. Assume now that you have had some additional discussions with Tony Santini, in which he told you he would like more information on the ROE and the riskiness of the alternative working capital policies under different sets of assumptions. For example, he asked you to assume that sales are independent of working capital policy, and then to determine the expected ROE and standard deviation of ROE under each policy if the sales estimates are \$11,000,000 for a weak economy, \$13,000,000 for an average economy, and \$14,500,000 for a strong economy. Similarly, he asked you to assume that a different manufacturing process is used, causing the mix of fixed and variable costs to change. Using the original sales estimate, he wanted to know what the expected ROE and standard deviation of ROE would be under the three policies if variable costs increased to 70 percent of sales (in all cases), and fixed costs decreased to \$1,000,000 under an aggressive policy, to \$1,500,000 under the moderate policy, and to \$2,000,000 under the conservative policy? How would your answers to these questions, and similar questions, be used by top managers as they actually make the working capital policy decision? Quantify your answer if you have access to the *Lotus* model, but just discuss the situation if you do not.

9. What is your recommendation regarding a working capital policy for Baxter Furniture, and in what form should the company raise short-term debt? You really do not have enough information to make a definitive statement when answering this question, but assume that Santini wants you to at least make a preliminary recommendation, which can be modified later if necessary.

**CALIFICACION DE
LA PRÁCTICA**



**FIRMA Y NOMBRE DEL
PROFESOR:**

PARTE III. ESTUDIO DEL CASO: KIDDYLAND CLOTHES , INC.

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, evaluará financieramente y tomará decisiones sobre políticas de crédito a clientes

DURACIÓN : 3 horas

Kiddyland Clothes manufactures children's clothing, including such accessories as socks and belts. The company has been in business since 1952, mainly supplying private label merchandise to large department stores. In 1987, however, the company started producing its own line of children's clothing under the brand name "Yuppiewear." An increasing number of two-income families has been accompanied by an increasing demand for high-status children's clothing, and Kiddy land was the first in its field to recognize this trend.

When Kiddyland's sales were primarily for private labels, the firm's financial manager did not have to worry much about its overall credit policy. Most of its sales were negotiated directly with the department stores' buyers, and the resulting contracts contained specific credit terms. The new line, however, represented a significant change-it is sold through numerous wholesalers under standard credit terms, so credit policy per se has become important. Lisa Wright, the assistant treasurer, has been assigned the task of reviewing the company's current credit policy and recommending any desirable changes.

Kiddyland's current credit terms are 2/10, net 30. Thus, wholesalers buying from Kiddyland receive a 2 percent discount off the gross purchase price if they pay within 10 days, while customers who do not take the discount must pay the full amount within 30 days. The company does check the financial strength of potential customers, but its standards for granting credit are not high. Similarly, it does have procedures for collecting past due accounts, but its collections policy could best be described as passive. Gross sales to wholesalers average about \$10 million a year, and 50 percent of the paying wholesalers (by dollar volume) take the discount and pay, on average, on Day 10. Another 30 percent of the payers generally pay the full amount on Day 30, while 20 percent tend to stretch Kiddyland's terms and do not actually pay, on average, until Day 40. Two percent of Kiddyland's gross sales to wholesalers end up as bad debt losses.

Don McCarthy, the treasurer, and Wright's boss, is convinced that the firm should tighten its credit policy. According to McCarthy, good customers will pay on time regardless of the terms, and the ones who would complain about a tighter policy are probably not good customers. Wright must make an analysis and then recommend a course of action. For political reasons, she has decided to focus on a tighter policy,

under which a 4 percent discount would be offered to customers who pay cash on delivery (COO) and 20 days of credit would be offered to customers who elect not to take the discount. Also, under the new policy stricter credit standards would be applied, and a tougher collection policy would be enforced. This policy has been dubbed 4/COD, net 20.

McCarthy likes this policy-he believes that increasing the discount would both bring in new customers and encourage more of Kiddyland's existing customers to take the discount. As a result, he believes that sales to wholesalers would increase from \$10 million to \$11 million annually, that 60 percent of the paying customers would take the discount, that 30 percent of the payers would pay on Day 20, that 10 percent would pay late on Day 30, and that bad debt losses would be reduced to 1 percent of gross sales. McCarthy's is not the only position, though-Emie Bush, the sales manager, has argued for an easier credit policy. Bush thinks that the proposed change would result in a drastic loss of sales and profits.

Kiddyland's variable cost-to-sales ratio is 75 percent; its pre-tax cost of carrying receivables is 12 percent; and the company can expand without any problems (or any cost increases) because it can subcontract production that it cannot handle in-house. Further, McCarthy is convinced that neither the variable cost ratio nor the cost of capital would change as a result of a credit policy change. Ernie Bush, however, thinks that the variable cost ratio might increase significantly if sales rise so much that the company is forced to use outside suppliers. Also, Bush, based on discussions with the cost accounting staff, thinks that the variable cost ratio might rise as high as 90 percent this coming year, even without an increase in sales, due to higher labor costs under a contract now being negotiated. Everyone agrees that there is little chance that costs will decline, regardless of the credit policy decision. Kiddyland's federal-plus-state tax rate is 40 percent.

Now Wright must conduct an analysis to estimate the effect of the proposed credit policy change on Kiddyland's profitability. She and McCarthy are very concerned about the analysis, both because of its importance to the company and also because of its "political implications" -the sales and production people have been lobbying against any credit tightening because they do not want to take a chance on losing sales and having to cut production, and also because they question the assumptions McCarthy wants to use. Therefore, Wright knows that her report will be critically reviewed. Working with McCarthy, she prepared the following set of questions for use as a guide in drafting her report Put yourself in her position and then answer the following questions. As you answer each question, think about the follow-up questions that other people, such as those in sales and production, might ask when the report is being reviewed.

Questions

1. What are the four variables which make up a firm's credit policy? How likely (and how quickly) are competitors to respond to a change in each variable, and is their response likely to be the same for a change toward tightness as one toward looseness?

2. What is Kiddyland's current days sales outstanding (DSO) (also called average collection period [ACP])? What would be the expected OSO if the credit policy change were made?

3. What is the dollar amount of bad debt losses under the current policy? What would be the expected bad debt losses under the proposed policy?

4. What is the cost of granting discounts under the current policy? What would be the expected cost under the new policy?

5. What is Kiddyland's dollar cost of carrying receivables under the current policy? What would be the expected cost under the new policy? (Use a 360-day year.)

6. What is the expected incremental profit associated with the proposed change in credit terms? Should Kiddyland make the change? (Hint: Construct income statements under each policy, and focus on the expected change. See Table 1 for a guide.)

Table 1 Incremental Profit Analysis

	Proposed Policy	Current Policy	Difference
Gross sales	X	10,000,000.	X
Discounts taken	X	98,000.	X
Net sales	X	9,902,000.	X
Production costs	X	7,500,000.	X
Net earnings before credit costs	X	2,402,000.	X
Credit-related costs:			
Receivables carrying cost	X	55,000.	X
Bad debt losses	X	200,000.	X
Net earnings before taxes	X	2,147,000.	X
Taxes (40%)	X	858,800.	X
After-tax profit	X	1,288,200.	X

7. Does your analysis up to this point consider the risks involved with a credit policy change? If not, how could risk be assessed and incorporated into the analysis?
8. Suppose the firm makes the change to 04/COD, net 20, but Kiddyland's competitors react by making similar changes in their terms. The net result is that Kiddyland's gross sales remain at the current \$10 million level!. If the remainder of Wright' s assumptions are correct, what would be the impact on Kiddyland's profitability?
9. Wright expects both the sales and production managers to question her assumptions, so she would like to know which variables are most critical in the sense that profitability is very sensitive to them. Then, she would like to know just how far off her assumption could be before the change to a tighter credit policy would be incorrect. If you have access to the *Lotus* model, do some sensitivity analyses, changing one variable at a time while leaving the others at their base case values. Which variables are most important in terms of their effects on profit, and how large an error could there be in the assumptions which you regard as being most critical before the decision should be reversed?
10. Also, if she could, Wright would like to have a better basis for the assumptions used in her report-as it stands, all she has to reir on is McCarthy's judgment, which is contrary to that of two other senior executives. What are some actions that Wright might take to improve the accuracy of her forecasts?

The following question prescnts an algebraic approach to analyzing changes in credit policy. Answer it only if it is assigned by your instructor.

11. As an altemative to constructing profit statements, an algebraic approach has been developed that focuses directly on the change in profits. To use this approach, it is first necessary to define the following symbols:
 S_0 = current gross sales.
 S_N = new gross sales after the change in credit policy. Note that S_N can be greater than or less than S_0 .
 V = variable costs as a percentage of gross sales. V includes production costs, inventory carrying costs, the cost of administering the credit department, ano all other variable costs except bao debt losses, receivables carrying costs, ano the cost of giving discounts.
 $1 - V$ = contribution margin, or the proportion of gross sales that goes toward covering fixed costs ano increasing profits.
 K = cost of financing the firm' s receivables.
 DSO^o = current days sales outstanding
 DSO_N = new average days sales outstanding after change in credit policy.
 B_0 = current bao debt losses as a proportion of current gross sales.

BN = new bad debt losses as a proportion of new gross sales.
 Po = proportion of current-collected gross sales that are discount sales.
 PN = proportion of new-collected gross sales that are discount sales.
 Do = current discount offered.
 DN = discount offered under new policy.
 T = tax rate

Calculate values for the incremental change in the firm's investment in receivables, M , and the incremental change in after-tax profits, ΔP , as follows:

$$\Delta P = V[(DSO_r - D_{500})(50/360)] + V[(D_{5N} - D_{50})(5N - 50/360)] - (1 - T)(5N - S_0)(1 - V) - I - (BN_{5N} - B_{50}) - [DN_{5NPN}(1 - BN) - D_0S_0P_0(1 - P_0)]$$

Note that, in the profit equation, the first term, $(1 - T)(5N - 50)(1 - V)$, is the incremental after-tax gross profit, the second term, I , is the incremental cost of carrying receivables, the third term, $BN_{5N} - B_{50}$, is the incremental bad debt losses, and the last term, $DN_{5NPN}(1 - BN) - D_0S_0P_0(1 - P_0)$, is the incremental cost of discounts.'

Use the equations presented here to estimate the change in profits associated with the new policy.

'Note that the analysis presented here is somewhat simplified in that the opportunity cost of the incremental investment in receivables from current customers is not considered.

For a complete discussion of the analysis, see Eugene F. Brigham and Louis C. Gapenski, *Intermediate Financial Management*, 3rd ed., Chapter 19.

CALIFICACION DE LA PRÁCTICA

FIRMA Y NOMBRE DEL PROFESOR:

MANUAL DE PRÁCTICAS

Licenciatura en Administración de Empresas
AD486 Práctica Integradora en Finanzas
Área de Formación: Prácticas Profesionales

PRÁCTICA 5 COSTO DE CAPITAL

LUGAR: Salón de clases

DURACIÓN: 9 horas

OBJETIVO: Determinar el costo de capital para tomar decisiones financieras

INTRODUCCIÓN

Uno de los aspectos relevantes dentro de las finanzas empresariales lo constituye la determinación del costo de capital como base de la tasa de descuento apropiada para evaluar proyectos de inversión y para tomar diversas decisiones financieras importantes para la empresa.

PARTE I. ESTUDIO DEL CASO: ADVANCED TECHNOLOGY COMPANY

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, determinará el costo de capital y lo empleará en la evaluación de alternativas de inversión en bienes de capital

DURACIÓN : 3 horas

Until now, the Advanced Technology Company has used the payback method as a primary evaluation technique for its major investment projects. Jay Carpenter, vice president for finance of Advanced Technology, was considering two discounted cash-flow approaches (net present value and internal rate of return) for measuring proposed capital expenditures. Mr. Carpenter concluded that, once he had estimated project cash flows, his biggest problem would be to choose the appropriate discount rate to use with the net present value method or to select the proper hurdle rate to use with the internal rate of return method. He felt that it would be wise to consider a discount rate or a hurdle rate for Advanced Technology only after first discussing the company's cost of capital. Mr. Carpenter, as chairman of the finance committee, had planned to present an estimate of the company's cost of capital at the next committee meeting on January 28, 1984.

Advanced Technology manufactures office automation systems and equipment. In addition to introducing a newly designed mainframe computer during the last few years, the company has aggressively increased its research in mini-computers and word processors. These products are in high growth markets and the firm's expenditures for these projects have more than proved their worth. Advanced Technology is recognized by those in the industry as one of the leading and most successful companies in the market. Many experts in the high-tech industry have projected a potential bonanza for mini computers and word processors over the next 10 years. Thus, the company plans to invest heavily in research and development for the next 5 years.

Mr. Carpenter began his assignment by establishing the sequence of his work schedule: (1) Determine the capital structure (proportions of long-term financing); (2) Compute the costs of the individual components of the capital structure; and (3) Combine these individual component costs to obtain the weighted average cost of capital.

Mr. Carpenter identifies 2 alternatives to specify the proportions of the capital structure: Book weights and the market proportions of the market values of the firm's outstanding securities. Book weights can be obtained from the balance sheet in Exhibit 1. Exhibit 3 shows that in 1983 the common stock had traded within a rather narrow range and centered on the closing price of \$14.50.

The price of the preferred stock had remained constant for some time at \$20 per share. Standard & Poor's recently upgraded the company's bond rating from Baa to A, which caused the price of the bond to increase sharply from \$ 80-85 range to a recent quote of \$ 90.

Mr. Carpenter estimated that the current yield to maturity for the company's bond is 12.4 percent before taxes. The company pays \$2.25 dividend (0.09 x \$25) per share of the preferred stock. Interest and dividends are directly measurable component costs of debt and preferred stock. However, there is no such measurable element for the COSÍ of common stock, because dividend declarations on common stock are made at the discretion of a firm's board of directors. Thus, the COSÍ of common stock is more difficult to measure. Carpenter felt that there was no best way to make his estimate. After he had examined a number of methods to compute the cost of equity, he decided to use the discounted cash-flow approach (dividend growth model):

$$K_e = (D_1/P_0) + g$$

where k_e = the cost of equity capital, D_1 = dividend per share of common stock expected at the end of one year, P_0 = current price per share of common stock, and g = expected growth rate in dividends. Carpenter assembled the data in Exhibit 3 to help him estimate the cost of equity capital using the discounted cash-flow approach.

EXHIBIT 1
Advanced Technology Company

Balance Sheet
(December 31, 1983)

Cash	\$ 1,500,000
Accounts receivable	3,500,000
Inventory	<u>5,000,000</u>
Total Current Assets	10,000,000
Gross plant and equipment	\$47,300,000
Less: accumulated depreciation	7,300,000
Net plant and equipment	<u>\$40,000,000</u>
Total assets	<u>\$50,000,000</u>
Accounts payable	\$ 3,500,000
Accruals	<u>1,500,000</u>
Total current liabilities	\$ 5,000,000
8% Debentures	\$ 20,000,000
9% Preferred stock (\$25 par; 400,000 shares issued and outstanding)	10,000,000
Common stock (\$2.50 par; 2,000,000 shares issued and outstanding)	5,000,000
Retained earnings	<u>10,000,000</u>
Total liabilities and net worth	<u>\$ 50,000,000</u>

EXHIBIT 2
Advanced Technology Company

Income Statement
(December 31, 1983)

Sales	76,000,000
Cost of goods sold	<u>55,000,000</u>
Gross profit	\$21,000,000
Operating expenses	11,600,000
Interest	<u>1,600,000</u>
Taxable income	\$ 7,800,000
Tax (50%)	<u>3,900,000</u>
Earnings after taxes	\$ 3,900,000
Dividend on preferred stock	<u>900,000</u>
Earnings available to common stockholders	\$ 3,000,000
Dividend paid to common stockholders	\$ 1,800,000

EXHIBIT 3

Advanced Technology Company
Recent Financial Data

Year	Price Range	Closing Price	Dividend per share	Earnings per Share
1978	S 9.75-12.25	Si 1.00	SO.64	SI.07
1979	SI L25-14.75	13.50	0.77	L28
1980	\$10.00-14.50	11.75	G.74	1.24
1981	\$12.00-16.25	13.75	0.80	1.34
1982	SI2.50-17.00	14.00	0.85	1.42
1983	\$13.75-15.50	14.50	0.90	1.50

1. Determine the company's book value weights and market value weights of outstanding securities. (2 puntos)
2. Calculate the company's cost of equity capital using the discounted cash flow approach. (2 puntos)
3. Compute the company's weighted average cost of capital using the book value weights and market value weights. Assume a marginal tax rate of 50 percent. (2 puntos)
4. Discuss the rationale behind the use of a weighted average cost of capital as the firm's cost of capital (discount rate). (2 puntos)
5. Discuss the pros and con of using market value versus book value weights. (2 puntos)

**CALIFICACION DE
LA PRÁCTICA**

An empty rectangular box with a black border, intended for the student's grade or score for the practical.

**FIRMA Y NOMBRE DEL
PROFESOR:**

PARTE II. ESTUDIO DEL CASO: BELTWAY TECHNOLOGIES, INC.

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, determinará el costo de capital y lo empleará en la evaluación de alternativas de inversión en bienes de capital

DURACIÓN : 3 horas

Beltway Technologies was founded 10 years ago by a group of scientists and engineers in the Washington, D.C. area. The firm's goal was to attain a leadership position in the electronic imaging market. Electronic imaging is a specialized technology that fills an important need for major firms marketing medical diagnostic imaging systems. By concentrating technology and production resources, Beltway was able to produce a superior film recorder at a price below its competitors' development and manufacturing costs. Beltway quickly became the leader in the video photography market, providing original equipment manufacturers (OEMs) such as GE, Philips, Toshiba, and Siemens with the hard-copy film recording devices used with their magnetic resonance and CAT scanners.

Over the years, Beltway noted that some aspect of electronic imaging will eventually be used by almost all businesses that use computers. As the need develops to input image data on a computer, or to output image data to hard copy, potential applications of Beltway's technologies are created. Recognizing this, Beltway's management is positioning the firm both for broader participation in medical diagnostic imaging and for new applications in computer graphics and industrial imaging.

At present, Beltway has 2 divisions: (1) The Medical Applications Division and (2) the newer Industrial Applications Division. The goal of the Medical Applications Division is to expand the number and use of Beltway's products in market areas in which the firm currently has a presence. The division's most recent product is a laser-based imaging system that will support the digital radiography systems of the future. With this system, radiologists are no longer constrained by the limitations of direct X-ray exposure on film. Rather, computers now process digitized electronic X-ray images, amplify diagnostic information, and display the result on a CRT. When the most useful "picture" is obtained, Beltway's imaging system is used to create the hard copy.

Table 1
 Beltway Technologies: Balance Sheet for the Year
 Ended December 31, 1989
 (in Millions of Dollars)

Cash	\$ 5.1	Accounts payable	\$ 3.8
Accounts receivable	26.4	Accruals	5.0
Inventory	<u>56.1</u>	Notes payable	<u>1.3</u>
Current assets	\$ 87.6	Current liabilities	\$ 10.1
Net fixed assets	26.3	Long-term debt	40.8
		Preferred stock	9.7
		Common stock	53.3
Total assets	<u>\$ 113.9</u>	Total claims	<u>\$ 113.9</u>

The Industrial Applications Division's goal is to become a market force in the rapidly developing areas of computer graphics and industrial imaging. The basic technology used here has many similarities to that used in medical imaging, and hence Beltway's managers predict a rosy future for this division. Two products are already being sold—a personal color recorder and a thermal transfer color printer. Intended for use with the IBM-PC line, these products make fast, high-quality, in-house graphics a reality.

Thus far, Beltway's growth has been somewhat helter-skelter, with superior technological know-how easily overcoming any deficiencies in managerial decision making. Now, as competition stiffens and the firm moves into uncharted waters, Beltway's board of directors is keenly aware that the firm must apply state-of-the-art techniques to its managerial decisions as well as to its product lines. As a first priority, the board has directed Beltway's CEO, John Caks, to develop an estimate for the firm's cost of capital, which the board plans to use at its next meeting when it will focus on new product decisions. Caks, in turn, has directed Beltway's financial manager, Bill Coates, to have a cost of capital estimate on his desk in a week.

To begin, Bill reviewed Beltway's 1989 balance sheet, which is contained in Table 1. Next, Bill assembled the following relevant data:

- (1) The firm's tax rate is 40 percent.
- (2) Beltway's 12 percent semiannual coupon bonds with 15 years remaining to maturity are not actively traded. However, a block did trade last week at a price of \$1,153.72 per bond.
- (3) Beltway uses short-term debt only to fund cyclical working capital needs.

(4) The firm's 10 percent, \$100 par value, quarterly dividend perpetual preferred stock is traded on the American Stock Exchange (AMEX). Its current price is \$113.10 per share; however, Beltway would incur flotation costs of \$2.00 per share on a new issue.

(5) Beltway's common stock is currently selling on the AMEX at \$50 per share. The firm's last dividend (D_0) was \$1.73, and dividends are expected to grow at roughly a 10 percent annual rate in the foreseeable future.

(6) The firm's historical beta, as measured by a stock analyst who follows the firm, is 1.2. The current yield on long-term T-bonds is 7.0 percent, and a prominent investment banking firm has recently estimated the market risk premium to be 6 percentage points.

(7) The required rate of return on an average (A-rated) company's long-term debt is 9 percent.

(8) Beltway's investment banker believes that a new common stock issue would require flotation costs, including market pressure and negative signaling, of 30 percent.

(9) The firm's market value target capital structure is 30 percent debt, 10 percent preferred stock, and 60 percent common stock.

(10) The firm is forecasting retained earnings of \$1,200,000 and a depreciation expense of \$3,000,000 for the coming year.

With these data at hand, consider the following questions which Bill must address in his analysis.

Questions

1. What sources of capital should be included in Beltway's cost of capital estimate? Should the component cost estimates be before tax or after tax? Should they be historical (embedded) or new (marginal)?

2. Consider Beltway's cost of debt.

a. What is the cost estimate for this component?

b. Should flotation costs be included? Explain.

c. Should the nominal cost of debt or the effective rate be used? Explain.

d. How valid is the estimate based on 15-year bonds if Beltway typically issues 30-

year long-term debt?

e. Suppose Beltway's outstanding debt had not been recently traded. What other methods could be used to estimate the firm's debt cost?

f. Would it matter if the bonds currently outstanding were callable? Explain.

3. Now consider the firm's cost of preferred stock.

a. What is the preferred cost estimate?

b. Beltway's preferred stock is more risky to investors than its debt, yet its before-tax yield to investors is lower than the yield on Beltway's debt. Does this suggest that you have made a mistake in your calculations?

c. Now suppose that Beltway's preferred had a mandatory redemption provision which specified that the firm must redeem the issue in 5 years at a price of \$110 per share. What would Beltway's cost of preferred have been in this situation?

4. Now consider the cost of common equity.

a. Why is there a cost associated with retained earnings?

b. What is Beltway's estimated cost of retained earnings using the CAPM approach?

c. Why is the T-bond rate a better estimate of the risk-free rate than the T-bill rate?

d. How do historical betas, adjusted historical betas, and fundamental betas differ? Do you think Beltway's historical beta is a good measure of its future market risk? Explain.

e. How can the market risk premium be estimated?

5. a. What is the discounted cash flow (DCF) cost of retained earnings estimate?

b. Suppose that Beltway, over the last few years, has averaged 15 percent return on equity (ROE) and paid out about 20 percent of net income as dividends. Can this information be used to help estimate the firm's future growth rate, g ?

6. What is the bond-yield-plus-risk-premium estimate for Beltway's cost of retained earnings?

7. What is your final estimate for k_s ? Explain how you weighed the estimates of the three methods.

8. What is the estimate for Beltway's cost of new common stock, k_e ?

9. a. Construct Beltway's marginal cost of capital (MCQ) schedule. At what amount of new investment would Beltway be forced to issue new common stock? (Ignore depreciation at this point.)

b. Would Beltway's MCC schedule remain constant beyond the retained earnings break point regardless of the amount of new capital required? (Again, ignore depreciation.)

10. What impact does depreciation have on Beltway's MCC schedule? Would the inclusion of depreciation affect the acceptability of proposed capital projects?

11. Could the overall corporate cost of capital developed in Question 9 be used at the divisional level? That is, is a single cost of capital appropriate for both the Medical Applications Division and the Industrial Applications Division? If not, what type of adjustment should be made?

12. What are Beltway's book value weights of debt, preferred stock, and common stock? (Hint: Consider only long-term sources of capital.) Should the book value or the market value weights be used in estimating a firm's overall cost of capital?

EVALUACIÓN FINAL:

Cada respuesta correcta se calificará con 10 puntos, los cuales se sumarán y se dividirán entre el número de las respuestas que debían estar correctas

**CALIFICACION DE
LA PRÁCTICA**



**FIRMA Y NOMBRE DEL
PROFESOR:**

PARTE III. ESTUDIO DEL CASO: YARDLEY BROTHERS, INC.

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, determinará el costo de capital y lo empleará en la evaluación de alternativas de inversión en bienes de capital

DURACIÓN : 3 horas

Yardley Brothers, Inc., a specialty food company headquartered in Dayton, Ohio, was recognized in the United States and Western Europe as a leader in the manufacture and distribution of seasonings and flavored products for the food industry. Processing facilities were found in 11 locations in the United States. The company was considering building a plant near Amsterdam as its first site in Western Europe. The company was organized into two divisions: Grocery Products, which accounted for 75 percent of sales, and Food Service, which was responsible for the remainder of the sales. A balance sheet and an income statement are included as Exhibit 27.1 and Exhibit 27.2. Selected statistics on Yardley Brothers are given as Exhibit 27.3.

During the 1980s, Yardley Brothers benefited tremendously from the increasing sophistication of American consumers. Since this group had both the means and the desire to try different types of foods, new and exotic seasonings were demanded. The product could also be used to spice up recipes that were low in cost when measured on a per serving basis. The company believed the willingness of consumers to experiment would continue during the 1990s. They felt that this would lead to more ethnic types of cooking and the use of more recipes from gourmet magazines. This line of thinking gave Yardley Brothers a solid base from which to expand its Grocery Products Division.

The Food Service Division manufactured and distributed seasonings and sauces as well as portion control and specialty products. This division had experienced only modest sales expansion during the 1980s, as growth was tied to fast-food outlets and they had grown at a relatively moderate rate. Management knew that for this division to expand, costs must be kept competitive. Management also realized that new products had to be developed to enable the division to experience growth, even if fast food remained a mature industry. Although studies had been done to determine whether the firm should move into activities distinctly apart from grocery products and food service, management had always decided to remain in those two areas. It believed that approach would allow profits to be earned without taking the risks associated with new projects.

During February, Laurie Benston, vice-president of finance, considered various

ways to finance several investment projects. Included in her list were a new processing plant in Western Europe, modernization of present processing facilities, the addition of a new plant in Florida or Georgia, and a major addition to working capital. The addition to working capital alternative involved providing funds to finance inventory growth necessary to expand the firm's line of seasonings.

Since Ms. Benston had requested capital estimates from the two operating divisions, each of the division heads had submitted proposals. From their recommendations, Ms. Benston had decided on the four projects previously mentioned. Her job then was to assemble the best financial package and to present it to the president of Yardley Brothers, Jackie Calmire. Ms. Benston planned to have the report completed by March 15 for negotiations beginning in mid-April.

Ms. Benston believed the amount of funds needed would be about \$30,000,000. Of the total, \$10,000,000 would be required for the Amsterdam plant, \$9,000,000 for the plant in the Southeast, \$7,000,000 for modernization, and \$4,000,000 for the inventory addition.

Her first contact was Irving Goldman, vice-president of the National Bank of Ohio, the firm's major banking connection. The bank was Yardley Brothers' principal source of short- and intermediate-type debt. In 1988, the bank was also instrumental in helping to secure, on favorable terms, \$15,000,000 in bond funds to replace short-term bank notes.

Mr. Goldman informed Ms. Benston that the bank would lend a maximum of \$15,000,000 at 8 percent over the prime rate, which was presently at 9 percent. The rate reflected the increased financial leverage incurred by the firm over the last 3 years. The loan, beginning on July 1, 1989, would mature in 10 years and would be payable in semiannual installments of \$750,000, plus outstanding interest on the unpaid principal.

Certain requirements and restrictions would be imposed on the loan: (1) net current assets must be maintained at a level of \$5,000,000, (2) the company would not declare cash dividends or purchase its own common stock in amounts in excess of 40 percent of net income in any one year, and (3) capital expenditures in any one year must not exceed 100 percent of depreciation charges, without the bank's approval. The covenant applied to the modernization of plant facilities, not to the two plants being constructed. The loan would be unsecured.

Mr. Goldman stated that for Yardley Brothers to receive these funds, the firm would have to raise the \$15,000,000 from retained earnings and securities junior to the bank's position. Since earnings less dividend payout was estimated at \$5,000,000 for the coming year, the remaining \$10,000,000 would have to come from junior securities. Although Ms. Benston had some reservations about the bank package, especially the restriction on capital expenditures, she decided to accept

informally the bank's commitment and to begin the search for other funds.

Although there were a number of ways to raise the needed funds, three possibilities seemed the most likely: preferred stock, common stock, and subordinated convertible debt. To discuss the type of financial package the firm might expect, Ms. Benston contacted Hargrow & Sacks, a regional underwriting organization located in Columbus, Ohio.

Craig Belton of the underwriting firm explained that a common stock issue would net the firm \$60 per share. This was found by subtracting a \$5 flotation cost from the current price of \$65. Preferred stock, sold at \$100 par, would have a 10.5 percent rate and would be cumulative. Convertible subordinated debentures would carry a rate of 9.5 percent, with a conversion price ranging between \$72 and \$78 per share. Ms. Benston believed that conversion would take place within one or two years, since forecasts for the firm and the stock market were favorable.

In preparing her report, Ms. Benston's job was to determine which of the following financial packages would produce the lowest cost of capital: (1) debt and common stock, (2) debt and preferred stock, or (3) debt and subordinated debentures. This presented her with difficult problems that needed resolution, if she were to be successful.

Ms. Benston knew two ways to calculate the cost of common equity: the Gordon model and the capital asset pricing model. There was also the question of the weights that should be assigned to each component of the cost of capital. Should the weights be based on the marginal funds being raised or based on the optimal mix of funds? If optimal weights were used, should she use book weights or market weights?

Ms. Benston wondered if the projects being financed would effect the cost of capital by changing the business risk of the firm. If this were the case, she knew the effect should be incorporated into the cost of capital calculation. While thinking about this, she was interrupted by one of her staff members asking how depreciation would figure in the calculation.

After much effort, Ms. Benston was able to compile some useful information. Exhibit 27.4, "Selected information concerning the cost of capital calculation," was the result.

Selected ratios for spices and seasonings manufacturers and wholesalers are presented in Exhibit 27.5.

EXHIBIT 27.1
Yardley Brothers, IDE.
Balance Sheets for Years Ending
December 31 (In Thousands)

<i>Assets:</i>	1986	1987	1988
Cash	\$ 2,291	\$ 2,750	\$ 2,839
Accounts Receivable	37,404	46,220	50,896
Inventories	77,776	92,443	93,291
Prepaid Expenses	1,727	2,295	3,090
Total Current Assets	<u>\$119,198</u>	<u>\$143,708</u>	<u>\$150,116</u>
Land and Improvements	3,867	4,328	4,069
Buildings and Improvements	22,328	25,004	27,396
Machinery and Equipment	52,091	62,735	70,833
Construction in Progress	2,432	2,566	6,846
Less: Accumulated Depreciation	<u>(35,077)</u>	<u>(42,218)</u>	<u>(46,756)</u>
Total Fixed Assets	\$ 45,641	\$ 52,415	\$ 62,388
Other Assets	12,207	7,424	4,570
Total Assets	<u>\$177,046</u>	<u>\$203,547</u>	<u>\$ 217,074</u>
 <i>Liabilities and Stockholders' Equity:</i>			
Accounts Payable and Accruals	\$ 47,436	\$ 49,441	\$ 51,282
Notes Payable	12,089	20,620	5,675
Current Portion, Long-Term Debt	1,240	1,450	2,100
Income Taxes	3,351	3,210	3,550
Dividends Payable	1,166	1,452	1,410
Total Current Liabilities	<u>\$ 65,282</u>	<u>\$ 76,173</u>	<u>\$ 64,017</u>
Long-Term Debt			
Bonds	21,300	31,300	48,800
Notes Payable	28,500	29,460	32,655
Total Long-Term Debt	<u>\$ 49,800</u>	<u>\$ 60,760</u>	<u>\$ 81,455</u>
Stockholders' Equity			
Preferred Stock, \$100 Par	\$ 1,250	\$ 1,250	\$ 1,250
Common Stock, \$1 Par	1,212	1,300	1,688
Retained Earnings	59,502	64,064	68,664
Total Stockholders' Equity	<u>\$ 61,964</u>	<u>\$ 66,614</u>	<u>\$ 71,602</u>
Total Liabilities and Stockholders' Equity	<u>\$ 177,046</u>	<u>\$ 203,547</u>	<u>\$ 217,074</u>

EXHIBIT 27.2
Yardley Brothers, Inc.

Income Statements for Years Ending December 31 (In Thousands)

	1986	1987	1988
Net Sales	\$ 300,268	\$ 342,873	\$ 406,970
Operating Expenses			
Cost of Goods Sold	196,483	222,220	266,494
Selling, General, and Administrative	90,879	105,776	124,125
Profit from Operations	\$ 12,906	\$ 14,877	\$ 16,351
Other Income	1,977	1,798	1,426
Other Expense	437	401	673
Interest Expense	4,538	4,278	4,344
Income Before Taxes	\$ 11,206	\$ 12,584	\$ 12,817
Taxes	4,538	4,278	4,344
Net Income After Taxes	\$ 6,668	\$ 8,306	\$ 8,473

EXHIBIT 27.3
Yardley Brothers, Inc.

Selected Statistics on Yardley Brothers, Inc.

	1986	1987	1988
Gross Profit to Net Sales	34.6%	35.2%	34.6%
Net Income to Assets	3.8%	4.1%	3.9%
Profit from Operations to Assets	7.3%	7.3%	7.5%
Current Ratio	1.83%	1.89%	2.35%
Acid Test Ratio	0.61%	0.64%	0.84%
Net Sales to Assets	1.70%	1.69%	1.87%
Return on Common Equity	11.0%	12.9%	12.0%
Per Common Share			
Earnings	\$5.54	\$6.39	\$5.14
Common Dividends	2.32	2.88	2.88
Book Value	50.43	50.28	42.64
Market Price (high)	63.25	68.875	75.50
→ Market Price (low)	38.00	40.00	43.125
Average P/E Ratio	9	10	12
Average Shares Outstanding	1,204	1,300	1,650
Average Number OF Employees	312.0	336.0	340.5

EXHIBIT 27.4
Yardley Brothers, Inc.

Selected Information Used in Calculating the Cost of Capital

I. Estimated Dividend (per Share) in Coming Year	\$3.50
II. Estimated Growth Rate in Earnings	8%
III. Estimated Beta of Yardley Brothers from Three Brokerage Houses	
+1.20	
+1.30	
+1.40	
IV. Estimated Risk-Free Rate Based on the 91-Day Treasury Bill Rate	6%
V. Estimated Market Rate of Return Based on Standard & Poor's 500	12%
VI. Current Capital Structure (book weights)	
Debt	52%
Preferred	1%
Common Equity	47%
VII. Optimal Capital Structure (book weights)	
Debt	40%
Preferred Stock	5%
Common Equity	55%

EXHIBIT 27.4
Yardley Brothers, Inc.

Selected Ratios for Spices and Seasonings Manufacturers and Wholesalers for the Following Calendar Periods

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
<i>Liquidity:</i>				
1. Current Ratio	1.5	1.5	1.4	1.4
2. Acid Test	0.8	0.8	0.7	0.7
3. Current Assets/Total Assets (%)	49.8	49.4	55.0	52.6
<i>Activity:</i>				
4. Receivables Turnover	13.2	13.8	14.0	14.0
5. Cost of Goods Sold/Inventory	9.4	11.6	10.0	10.2
6. Net Sales/Net Working Capital	17.3	17.8	22.3	22.6
7. Net Sales/Total Assets	3.9	4.1	3.9	3.7
<i>Leverage:</i>				
8. Total Debt/total Assets (%)	62.0	61.5	65.8	65.6
9. Debt/Net Worth	1.7	1.6	2.3	2.3
10. EBIT/Interest	2.9	2.5	2.5	2.7
<i>Profitability:</i>				
11. COGS/Net Sales (%)	77.7	77.4	79.6	78.7
12. Operating Profit/Net Sales (%)	3.7	2.4	2.8	2.7
13. Profit Before Taxes/Net Sales (%)	2.8	1.8	2.1	2.1

14. Profit Before Taxes/Total Assets (%)	8.5	5.9	5.0	5.7
15. Profit Before Taxes/Net Worth (%)	23.8	17:5	17.8	17.1

QUESTIONS

1. Compare the capital asset pricing model with the Gordon model in calculating the cost of equity.
2. Discuss the issues involved in using marginal weights and optimal weights in determining the cost of capital.
3. Discuss the use of book weights versus market weights in finding the optimal capital structure.
4. Explain whether or not depreciation charges should be included in the cost of capital calculation.
5. Explain what effect, if any, the business risk of projects in the capital budget will have on the cost of capital.
6. Calculate the cost of capital assuming that debt and common stock are issued. (Where there is a choice of models and techniques, state your assumptions and be able to defend your calculations.)
7. Recalculate Question 6 assuming that debt and preferred stock are issued.
8. Recalculate Question 6 assuming that debt and subordinate convertible debt are issued. (In answering this question, comment on the convertibility feature as it relates to the cost of capital.)
9. Select the most appropriate financing package for the firm, giving the reasons for your choice.

EVALUACIÓN FINAL:

Cada respuesta correcta se calificará con 10 puntos, los cuales se sumarán y se dividirán entre el número de las respuestas que debían estar correctas

CALIFICACION DE LA PRÁCTICA

FIRMA Y NOMBRE DEL PROFESOR:

MANUAL DE PRÁCTICAS

Licenciatura en Administración de Empresas
AD486 Práctica Integradora en Finanzas
Área de Formación: Prácticas Profesionales

PRÁCTICA 6 ESTRUCTURA DE CAPITAL

LUGAR: Salón de clases

DURACIÓN: 3 horas

OBJETIVO: Analizar las estructuras de capital
alternativas en la empresa

INTRODUCCIÓN

Uno de los aspectos relevantes dentro de las finanzas empresariales lo constituye el análisis y definición de la estructura capital para tomar diversas decisiones financieras importantes para la empresa.

ESTUDIO DEL CASO: FLORAL CONCEPTS, INC.

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, determinará y evaluará estructuras de capital de capital

DURACIÓN : 3 horas

Floral Concepts, Inc., a producer of high-quality artificial flowers, was founded in 1981 by Edward Flowers, president and chief executive officer, and Susan Malley, senior vice president. In 1980, when Flowers was working on his PhD in materials science, he discovered a way to use acetate cloth to make a new type of artificial flower. Flower petals and leaves could be formed from acetate cloth that had been treated with a plastic resin, allowing the individual piece to retain its shape and durability, but still have the texture and feel of silk. Flowers developed a prototype, and he then asked several friends in the florist business to evaluate the product. The production cost of the acetate flowers was less than one-fourth of the cost of high-quality silk flowers, yet the two were virtually indistinguishable, so the florists were quite enthusiastic. With the strong endorsement of the florists, Flowers abandoned plans for a teaching career and teamed up with Malley, who had strong financial and managerial talents, to form Floral Concepts, Inc. Flowers currently owns 30 percent of the stock, Malley owns 25 percent, other employees own 10 percent, and the remaining 35 percent is held by the public and trades in the over-the-counter market.

Although the company has experienced reasonable growth, Flowers and Malley do not think they have even scratched the surface of the potential market for high-quality artificial flowers. Further, in early 1989, Flowers developed a revolutionary production method for manufacturing certain types of acetate flowers. With the new process, it will be possible to form the very complex shapes required for artificial peonies, hyacinths, dahlias, and other flowers with small, curved petals. These flowers are very popular in live arrangements, but molded plastic imitations are not of high enough quality to permit florists to use them in artificial bouquets.

Table 1
1990 Sales Estimates for Floral Concepts' New Acetate Flowers

<u>Probability</u>
0.1, 0.2, 0.4, 0.2, 0.1
<u>Unit Sales (in Gross)</u>
80,000 , 110,000 , 150,000, 190,000, 220,000

Even silk facsimiles have never achieved the same degree of realism that has been possible with less complex flowers such as roses, orchids, and lilies. Also, the labor required to produce silk versions of small-petaled artificial flowers has made them too expensive for most applications.

Production tests for the new process have been completed, so the only uncertainty about the economics of the new production system is associated with the demand for the flowers. The traditional market for high-quality artificial flowers consists mainly of florists and professional flower arrangers, although flowers are sold to individuals through decorators and high-priced boutiques. Many individuals do buy plastic artificial flowers for various uses, but the acetate flowers would be more expensive than the plastic kind, even if they were made with the new high-volume production system. So, there is a real question as to the demand for the new flowers.

Despite the uncertainty over the ultimate market for the acetate flowers as reflected in Table 1, Flowers and Malley are committed to shifting to the new production system. Further, they have concluded that since plant expansion is necessary to implement the new system, the firm should expand now to meet the future growth requirements that are likely to occur as more and more individuals enter the demand side of the market. The projected total capital outlay, plus the additional working capital needed, requires a \$13 million increase in total assets during 1990.

The new production method will incur fixed costs of \$3.5 million per year and variable costs of \$150 per gross (12 dozen, or 144, flowers). The estimated sales price is \$200 per gross, or roughly \$1.39 per flower. Although this is three times the cost of regular plastic flowers, it is still less than one fourth the price of high-quality silk replicas.

To finance the expansion, Floral Concepts can use bonds, common stock, or a combination of the two. The Board of Directors—but in reality, Flowers and Malley—have to make the final decision about the financing method. In a recent directors' meeting, two views were presented. One director, Glenn Petry, chairman of the board of Southern Capital Corporation, an investment banking and brokerage firm which makes a market in Floral Concepts' stock, strongly recommends that the company choose debt financing at this time. Petry believes that inflation is likely to increase significantly in the next few years as the falling dollar makes imports more and more expensive, and that debt incurred now can be repaid in the future with "cheap dollars." Petry says his discussions with the company's stockholders (Petry's firm has many customers who own Floral Concepts stock) suggest that the investing public is currently more interested in companies that are willing to use leverage than in conservative firms. He also notes that most investors hold diversified portfolios, which minimize the risk on any one stock, so this increases their willingness to assume more risk on an individual security.

Gary Emery, president of First National Bank, takes the opposite point of view. He argues that the firm's risk will be increased too much if it sells additional debt at this time. Emery maintains that although the sales forecasts are favorable, the cost of getting the new process installed and operating could be higher than anticipated, or sales could fall below the anticipated level, in which case the company could be in serious trouble. Emery also notes that his bank uses the debt ratio as a measure of corporate strength. He adds that investors' aversion to risk generally results in lower stock prices for companies with high debt ratios. Emery also stresses that if the company uses additional common stock now, its financial position will be strong, and if demand should exceed expectations, requiring new facilities in the near future, the company would be in an excellent position to sell debt at a later date. Finally, Emery states that his bank's economists believe that interest rates will soon fall, so, if the company defers debt financing, it may be able to obtain debt at an even lower cost in the future.

The currently outstanding long-term debt (see Table 2) carries a 9 percent interest rate. Because the general level of interest rates is higher now than it was when the old debt was issued, the new debt would carry a higher rate. A "poison pill" provision in the contract for current outstanding debt states that it must be retired (at par) at the holders' option before any new long-term debt can be issued, if the new debt carries a rate of interest above 9 percent. At the directors' meeting, Petry indicated that this provision would present no problem because the company would be able to raise enough new debt to provide funds for the expansion and also to pay off the old debt.

Another clause in the debt contract states that there is a 20 percent prepayment penalty for repaying the debt ahead of schedule, unless it is refunded with higher-cost debt. Thus, Floral Concepts is effectively precluded from reducing its long-term debt below \$10 million.

When Flowers and Malley pressed Petry and Emery for information on how increasing the debt ratio would affect the price/earnings ratio, there was some disagreement. Emery thought that the current price/earnings ratio of 6.5 would decline, while Petry believed that Floral Concepts'

Table 2
Financial Statements of Floral Concepts, Inc.
Income Statement for Years Ended December 31
(Thousands of Dollars)

	1988	1989
Sales	32000	40000
Total costs (excluding interest)	20899	25500
Earnings before interest and tax (EBIT)	11101	14500
Interest on long-term debt	630	900
Earnings before tax	10471	13600
Tax (40 percent)	4188	5440
Net Income	6283	8160

Table 3
Financial Statements of Floral Concepts, Inc.
Balance Sheet for Years Ended December 31 (Thousands of Dollars)

	1988	1989
Current assets	12850	13500
Net fixed assets	8950	14500
Other assets	5200	7000
Total assets	27000	35000
Current liabilities	4500	6480
Long-term debt (9 percent)	7000	10000
Common stock, \$2.50 par value	5000	5000
Retained earnings	10500	13520
Total claims	27000	35000

investors would not be adverse to a higher debt level, so the current *PIE* ratio would not change.

A \$13 million increase in total assets will be required to implement the new production process, and the investment bankers have indicated that debt would be available according to the following schedule. The rates shown are not marginal rates in the sense that each is applied just to its respective increment; rather, the rates are applied to the entire amount of debt issued. For example, if the firm borrows \$15 million, the interest cost on the entire amount would be 13 percent. Also, remember that the \$10 million of outstanding 9 percent debt must be retired if the company chooses to use additional debt.

<u>Amount Borrowed</u>	<u>Interest Rate</u>
\$ 7.01 to \$11 million	11.50%
11.01 to 14 million	12.25
14.01 to 17 million	13.00
17.01 to 20 million	14.00
20.01 to 23 million	16.00

The matter of the PIE ratio was especially troubling to Emery, so he consulted with several investment bankers for their opinions. Based on these conversations, he concluded that the following schedule is applicable:

<u>Long-Term Debt/Assets</u>	<u>P/E</u>
up to 30%	6.5
30.1% -36%	5.5
36.1 % - 45%	5.0
45.1% -50%	4.5

The debt / assets ratios shown here do not include current liabilities; they relate only to long-term debt. If short-term debt were included, the data would not be materially different. Emery sent the figures to Malley and asked her to take them into account before reaching a decision.

Flowers and Malley concluded that Malley should prepare a report for presentation at the next directors' meeting. Now she asks you, her assistant, to help with the report by answering the following questions. A partially completed worksheet is provided in Table 3 to help you with some of the questions.

Questions

1. Calculate expected earnings per share and stock prices at capital structures of \$10, \$11, \$14, \$17, \$20, and \$23 million of long-term debt. Assume a 30 percent growth rate from 1989 to 1990 in EBIT from existing operations, and combine this projected 1990 "assets-in-place" EBIT with the expected incremental EBIT resulting from the new expansion. Floral Concepts expects that its federal-plus-state tax rate for 1990 and the foreseeable future will be 40 percent. Also, assume that any funds not raised by debt will be raised by selling common stock at a net price of \$20 per share (\$25 price to the public less a \$5 per share flotation cost). Which capital structure alternative would you recommend? (Hint: Consider stock price maximization as the firm's primary goal and use Table 3 as a guide.)

2. Use data from your answer to Question 1, and suppose the optimal amount of debt is raised in the form of a 20-year amortized term loan. What would the annual

amortization payment be? Use this value to calculate the debt service coverage ratio for 1990.

3. What is Floral Concepts' expected rate of return on common equity at the optimal capital structure? (The expected rate of return on equity is equal to the expected net income available to common stockholders divided by total common equity.)

4. Assume that Floral Concepts plans to pay out all earnings as dividends and thus to have a zero growth rate, and that investors are aware of this. What value for k is implied at the optimal capital structure?

5. If Flowers, Malley, and the other Board members had only a small stock ownership, might their financing decision be influenced by whether their compensation consisted entirely of a fixed salary or included a substantial element in the form of stock options? Explain, and answer more in general terms than in relation to the data in the case.

6. Suppose the cost of the expansion is uncertain, and could run as high as \$20 million, well above the original estimate of \$13 million. How would this possibility affect your recommendation? If you are using the *Lotus* model for this case, calculate the expected stock price for each capital structure, assuming a \$20 million cost of expansion.

7. Suppose Petry is correct, and the PIE ratio actually would remain at the current level even if the debt ratio were increased up to the limits given in the case. How would this affect the expected outcome?

8. Based on the information given in the case, does it appear that the investing public is aware of the plans for the new process? What difference would it make if the public knew or did not know about the new situation? If the public was not informed, would it be to the company's advantage to try to inform them? If so, how could the information be conveyed? If any of the Board members had some extra money, would you recommend that they purchase the company's stock on the open market at this time?

9. No mention of the capital asset pricing model (CAPM) was made in the case because the CAPM was not considered in the actual decision. Explain how CAPM concepts might have been employed in the analysis. Be sure to discuss how financial leverage would affect the firm's beta coefficient and, hence, the firm's cost of equity and value.

10. Remember that Flowers and Malley each own a substantial amount of the outstanding stock (assume that this stock represents essentially all of their personal net worths). What impact does potential loss of control have on the capital structure decision?

The analysis used in the case extended only one year into the future. To look farther into the future, what additional information would you need? Based on the (very limited) information about the extended future given in the case, do you think it likely that projections for the extended future might alter the conclusions you reached?

**CALIFICACION DE
LA PRÁCTICA**



**FIRMA Y NOMBRE DEL
PROFESOR:**

MANUAL DE PRÁCTICAS

Licenciatura en Administración de Empresas
AD486 Práctica Integradora en Finanzas
Área de Formación: Prácticas Profesionales

PRÁCTICA 7 FINANCIAMIENTO EMPRESARIAL A LARGO PLAZO

LUGAR: Salón de clases

DURACIÓN: 6 horas

OBJETIVO: Analizar las fuentes de
financiamiento a largo plazo

INTRODUCCIÓN

Entre las decisiones mas importantes a tomar por los directivos en el campo de las finanzas, se encuentran las relacionadas con la elección de la fuente de financiamiento a largo plazo a emplear para las estrategias plateadas.

PARTE I. ESTUDIO DEL CASO: METREX MANUFACTURING, INC.

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, evaluará la alternativa de arrendamiento financiero, respecto a la alternativa de comprar el activo mediante proyectos de inversión

DURACIÓN : 3 horas

Metrex Manufacturing has decided to automate their production process. The necessary new equipment must be custom manufactured and will be purchased. The electronic devices for controlling the new production line contain many standard components although their arrangement and functions must also be customized to meet Metrex's particular needs.

These electronic control devices may either be leased or purchased (using borrowed money). That is the decision that currently faces Metrex. Economic conditions at the time (May 1986) create an added dimension to the lease-buy analysis.

If the manufacturer sells the electronic devices as part of the equipment they will cost \$215,000 and will be financed, along with the rest of the purchase, at 10 percent for six years. The loan will be for the full amount, amortized with level annual payments, starting one year after installation.

If Metrex decides to lease it has a number of choices. Because lessors borrow money to finance their operations, the cost of leases vary with interest rates. The installation will not be completed until August 1986. Therefore, the lessor would not be required to pay for the equipment until then. If interest rates go up the required lease payments will increase; if rates go down so do the lease payments. Metrex can lock in a payment schedule now if it wishes but the lease payments will include an interest charge to compensate the lessor for the cost of tying up its money between May and August.

If Metrex so chooses, it can lock in a six-year lease with annual payments of \$42,000. If Metrex decides to take a chance, the payment could be as low as \$41,000 - if interest rates drop. However, if interest rates go up the payments could be as high as \$43,000 per year.

The proposed lease is a net, net lease. Metrex would pay all maintenance, property taxes, and insurance. There would, therefore, be no difference in the operating expenses between owning and leasing.

There would be material differences in the tax treatment, however. These tax differences are important to Metrex because it is in the 40 percent tax bracket. With leases the entire payment is tax deductible. With borrowing only the interest component of the payments are deductible. Ownership allows Metrex to deduct expenses for the cost of the equipment. These investment costs are computed using the accelerated cost recovery system (ACRS). Under ACRS.

Metrex can write off the following percentage of the depreciable basis of the devices:

Year	Percentage
1	15
2	22
3	21
4	21
5	21

Further the equipment could have a sizeable salvage value. Although the installation is tailored to a specific application, the electronic components are standardized and subject to little, if any, wear. Six years from now the salvageable components could still be worth as much as \$100,000. That salvage is by no means certain - a major technological innovation could render the components worthless. Because of the risk involved, the salvage value (which will be taxed) is discounted at a rate of 16 percent.

QUESTIONS

1. Compute the amount of each of the six end-of-year payments used for financing the \$215,000 purchase.
2. Prepare a loan amortization schedule detailing the amount of principal and interest in each year's payment.
3. Using Metrex's after-tax cost of borrowing (10 percent before tax), calculate the present value cost of borrowing and buying the electronic control devices:
 - a) With zero salvage, and
 - b) With \$100,000 salvage (discounted at 16 percent).
4. Calculate the present value cost of leasing using:
 - a) The currently available \$42,000 lease payments,
 - b) The \$43,000 payments if interest rates go up, and
 - c) The \$41,000 payments if rates go down.
5. Would you lease or buy the equipment? If you lease, would you lock in current lease rates or take your chances? What factors influenced your decisions?

EVALUACIÓN FINAL:

Cada respuesta correcta se calificará con 10 puntos, los cuales se sumarán y se dividirán entre el número de las respuestas que debían estar correctas

**CALIFICACION DE
LA PRÁCTICA**

An empty rectangular box with a black border, intended for the student's score on the practical exercise.

**FIRMA Y NOMBRE DEL
PROFESOR:**

PARTE II. ANÁLISIS DE LAS FUENTES DE FINANCIAMIENTO EN MÉXICO

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, investigará sobre las fuentes de financiamiento en México

DURACIÓN : 3 horas

PROCEDIMIENTO GENERAL

1. Cada equipo deberá buscar información sobre las fuentes de financiamiento en México, empleando para ello el Internet, la bibliografía y hemerografía especializada, así como la visita a empresas e instituciones financieras
2. Cada equipo tendrá una hora para presentar sus resultados, del cual deberá entregar una copia escrita al profesor

Los aspectos a evaluar a cada equipo será: (cada aspecto equivaldrá a 2 puntos)

1. Profundidad de la investigación efectuada
2. Integración mostrada como equipo
3. Calidad de la presentación y claridad en la exposición de las ideas
4. Precisión en las respuestas a las preguntas efectuadas
5. Validez del análisis efectuado y de las conclusiones y juicios emitidos

**CALIFICACION DE
LA PRÁCTICA**



**FIRMA Y NOMBRE DEL
PROFESOR:**

MANUAL DE PRÁCTICAS

Licenciatura en Administración de Empresas
AD486 Práctica Integradora en Finanzas
Área de Formación: Prácticas Profesionales

PRÁCTICA 8

VALUACIÓN

LUGAR: Salón de clases

DURACIÓN: 3 horas

OBJETIVO: Analizar empresas utilizando diversos enfoques financieros

INTRODUCCIÓN

La valuación de empresas es un momento importante para la toma de diversas decisiones, entre ellas las relacionadas con las compras de empresas, en fusiones y adquisiciones

ESTUDIO DEL CASO: THE PRIMO PIZZA COMPANY

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, valorará una empresa

DURACIÓN : 3 horas

The Primo Pizza Company sells frozen pizzas in various sizes to independent contractors and supermarkets in the Chicago metropolitan area. The company was founded by Joe Pepperoni in 1982 and since then the company has enjoyed rapid sales growth and remarkable brand name acceptance by consumers. The primary reason for this success is the quality and consistency of the product which is made with the finest ingredients including Joe Pepperoni's secret pizza sauce formula. Although there are several national brand frozen pizzas sold in the Chicago market, Primo's is the only local brand that has captured a significant market share.

Although Pepperoni knows how to produce a high quality pizza, unfortunately he knows less about financial management. As a consequence, the company is having difficulty servicing its debt. As shown in Exhibit 1, the company has a large debt burden. This debt is due to some poor investment decisions made by Pepperoni. Pepperoni is concerned that the debt problem threatens the company's survival. Since the local bank will not grant additional loans to the company until it improves its balance sheet, Pepperoni is interested in selling a 25 percent interest in the company to his long-time friend Tom Tully. Tully has more than a passing interest in Primo's because he owns a cheese factory. Tully believes that he can expand his cheese sales through the Primo Pizza line. However, Tully does not want to overpay for his ownership interest. Pepperoni gave Tully the company's income statements for the past four years as shown in Exhibit 2. These statements show that the company has a very favorable profit trend even though the company has never made a profit to date.

To assist Tully in making this investment decision, Tully retained Mark Flannigan, a financial consultant, to make a detailed financial evaluation and valuation of the company. Tully told Flannigan that Pepperoni is asking \$250,000 for a 25 percent ownership interest; Tully wanted to know if that price was reasonable. As a first step, Flannigan developed common size balance sheets and percent income statements as shown in Exhibits 3 and 4 respectively. By comparing these statements to the industry, Flannigan was able to identify areas of disparity. In addition, Flannigan made a detailed cross-sectional and time series financial ratio analysis to assess the firm's financial condition and performance. This analysis is shown in Exhibit 5.

EXHIBIT 1
The Primo Pizza Company Balance Sheets, 1982- 1985

	1982	1983	1984	1985
Current assets				
Cash	\$ (10,200)	\$ (11,200)	\$ 16,000	\$ (26,900)
Accounts receivable	27,600	51,100	104,500	116,000
Inventory	28,300	38,500	36,000	65,500
Other current assets ¹	15,300	24,600	100	100
Total Current Assets	\$ 61,000	\$ 103,000	\$ 56,600	\$ 154,700
Property Plant & Equip.	\$ 272,000	\$ 283,000	\$ 286,000	\$ 308,000
Less: Accumulated Depreciation	34,000	78,000	112,000	131,000
Total Property Plant & Equip.	\$ 238,000	\$ 205,000	\$ 74,000	\$177,000
Other assets	\$ 7,000	\$ 6,000	\$ 5,400	\$ 5,300
Total Assets	\$ 306,000	\$ 314,000	\$ 336,000	\$ 37,000
Current Liabilities				
Accounts Payable	\$ 64,000	\$ 51,000	\$ 87,000	\$ 117,000
Notes Payable	185,000	59,000	121,000	111,000
Other Current Liabilities ²	8,200	25,400	18,800	15,000
Total Current Liabilities	\$ 257,200	\$ 135,400	\$ 226,800	\$ 43,000
Long-Term Debt	\$ 148,000	\$ 314,000	\$ 82,000	\$ 268,000
Capital Stock	\$ 0	\$ 50,000	\$ 55,000	\$ 55,000
Retained Earnings	(99,200)	185,400)	(227,800)	(229,000)
Total Owner's Equity	\$ (99,200)	\$ (35,400)	\$(172,800)	\$(174,000)
Total Liabilities & Owner's Equity	\$ 306,000	\$314,000	\$ 336,000	\$ 337,000

¹ Advances to employees, due from stockholders, and prepaid interest

² Other payables and accruals

EXHIBIT 2
The Primo Pizza Company Income Statements, 1982-1985

	1982	1983	1984	1985
Sales	\$717,500	\$912,000	\$1,291,000	\$1,550,000
Expenses				
Direct Costs	\$473,000	\$563,000	\$ 827,000	\$ 994,000
Indirect Costs	82,600	86,000	119,000	155,000
Cost of Sales	\$555,600	\$649,000	\$946,000	\$1,149,000
Selling, general and administrative expenses	267,000	253,000	303,000	372,000
Non-operative (Income) / Expense	(5,900)	45,000	57,000	29,000
Net Income (Loss) Before Taxes ¹	\$ (99,200)	\$ 35,000)	\$(15,000)	\$ 0

¹ Before and after tax loss is the same.

EXHIBIT 3
The Primo Pizza Company Common Size Balance Sheets 1982-1985

Assets	1982	1983	1984	1985	1985 Industry Average
Cash	(3)%	(3)%	5%		9%
Accounts Receivable	9	16	31		18
Inventory	9	12	11		21
Other Current Assets ¹	5	8	0		4
Plant & Equipment (net)	78	65	52		33
Other Assets	2	2	1		15
	100%	100%	100%		100%
Liabilities & Equity					
Accounts Payable	21%	16%	26%		11%
Notes Payable	60	19	36		5
Other Current Liabilities ²	3	8	5		13
Long -Term Debt	48	100	84		15
Owner's Equity	(32)	(43)	(51)		56
	100%	100%	100%		100%

¹Advances to employees, due from stockholders, and prepaid interest.

²Other payables and accruals.

EXHIBIT 4
The Primo Pizza Company Percent Income Statements 1982-1985

	1982	1983	1984	1984 Industry Average	1985 Industry Average
Sales	100%	100%	100%	100%	100%
Cost of Sales	77	71	73	72	72
Selling, General and Administrative Expenses	37	28	24	N/A ¹	N/A
Non-Operating (Income)/ Expenses	(1)	5	4	N/A	N/A
Net Income (Loss) After Tax	(13%)	(4%)	(1%)	3.1%	4.8%
	100%	100%	100%	100%	100%

¹ Not available.

Flannigan explained to Tully that a fair market price for Primo's is based on going concern value which is the value of a company in the hands of the existing owners. The relevant measure of economic benefit is cash flow which is defined as net operating income before deductions of payments to financing sources but after the deductions of applicable taxes. Specifically, Flannigan proposes to use the following valuation formula.

$$V = \sum_{t=1}^8 \frac{NIAT_t + I_t(1-T)}{(1 + MCC)^t}$$

where NIAT_t = net income after tax in year t
 I_t = interest in year t
 T = marginal tax rate
 MCC = marginal cost of capital

Since the cash flows are generated from sales, Flannigan developed a multiple regression model based on historic sales to forecast future sales. Flannigan's sales forecasts are as follows:

<u>Year</u>	<u>Forecasted Sales</u>
1986	\$1,329,654
1987	2,312,969
1988	3,296,284
1989	4,279,600
1990	5,262,915

To develop pro-forma income statements, Flannigan assumed that cost of sales would be 72 percent of sales, selling expenses and general administrative expenses would be 19 percent of sales and interest would be 2 percent of sales. The average tax rate is assumed to be 43 percent. In developing pro-forma financial statements, Flannigan noted that Primo's had a tax loss carry forward of \$20,174,011 its 1985 corporate income tax return. Flannigan knew that some of his assumptions on expenses were optimistic in light of Primo's historic figures but he thought that Pepperoni could tighten up the operations.

Estimating the discount rate for the Primo Pizza Company was difficult because Primo's was a closely-held firm; there was no active market for the company's stock. Accordingly, Flannigan decided to develop a profile of pizza manufacturers. This analysis indicated that the average debt ratio is 22 percent while the equity proportion is 78 percent. These proportions were deemed to be optimal for Primo's. Flannigan also assumed that Primo's future long-term cost of debt would be 11 percent before-tax. Flannigan estimated Primo's cost of equity using the capital asset pricing model and assuming that the riskless rate would be 10.4 percent, the expected return on the

market portfolio would be 15 percent, and the beta coefficient for pizza manufacturers would be 1.00. With this data Flannigan would estimate the weighted average cost of capital and use it as a discount rate in his valuation model. For years 1991 and thereafter, Flannigan assumed that the yearly cash flow would be the same as the 1990 cash flow, implying no growth.

QUESTIONS

1. Fill in the missing values for the 1985 common size balance sheet as shown in Exhibit 3. Interpret Exhibit 3.
2. Fill in the missing values for the 1985 percent income statement as shown on Exhibit 4. Interpret Exhibit 4.
3. Calculate the missing 1985 financial ratios for Primo's as shown in Exhibit 5. Interpret Exhibit 5.
4. Develop annual pro-forma income statements for Primo's for the next five years and calculate a most likely value for a 25 percent interest in the firm, assuming an infinite life
5. What methods can be used to adjust for the possibility of bankruptcy?

EVALUACIÓN FINAL:

Cada respuesta correcta se calificará con 10 puntos, los cuales se sumarán y se dividirán entre el número de las respuestas que debían estar correctas

Cases in Financial Management
Third Edition Apilado, Poe, Kudla,
Gallinger & Henderson

EXHIBIT 5
The Primo Pizza Company Financial Ratio Analysis 1982-1985

	1982	1983	1984	1985
Liquidity				
Current Ratio				
Primo	.24	.76	.69	
Industry	1.90	1.90	1.90	2.20
Quick Ratio				
Primo	.13	.48	.53	
Industry	1.00	1.00	1.00	1.10
Activity				
Inventory Turnover				
Primo	25.3	23.6	35.4	
Industry	13.5	16.4	19.4	18.9
Average Collection Period				
Primo	14.1	20.5	29.6	
Industry	25.1	23.5	21.9	23.7
Sales/Net Fixed Assets				
Primo	3.0	4.4	7.4	
Industry	9.1	6.9	4.8	5.9
Sales/Total Assets				
Primo	2.4	2.9	3.8	
Industry	3.1	3.2	3.2	2.8
Debt Management				
Total Liabilities/Net Worth				
Primo	- 4.1	- 3.3	- 2.9	
Industry	.8	.9	1.1	.7
Profitability				
Return on Sales (%)				
Primo	-13	-4	-1	
Industry	3.9	4.4	4.9	3.8
Return on Total Assets (%)				
Primo	-32	-11	- 5	
Industry	10.8	9.4	8.0	9.3

**CALIFICACION DE
LA PRÁCTICA**

An empty rectangular box with a black border, intended for the teacher's grade or mark for the practical.

**FIRMA Y NOMBRE DEL
PROFESOR:**

MANUAL DE PRÁCTICAS

Licenciatura en Administración de Empresas
AD486 Práctica Integradora en Finanzas
Área de Formación: Prácticas Profesionales

PRÁCTICA 9

INVERSIONES

LUGAR:

Salón de clases

DURACIÓN:

6 horas

OBJETIVO:

Analizar diversos instrumentos de inversiones

INTRODUCCIÓN

Una de las actividades de un especialista de las finanzas lo constituye el análisis de las inversiones en el mercado de valores, tanto en instrumentos de renta fija o instrumentos de renta variable, así como la formulación y análisis de portafolios de inversión y todo lo relacionado con la actividad de las sociedades (o fondos) de inversión.

PARTE I. ANÁLISIS DE LAS TASAS DE INTERÉS EN MÉXICO

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, investigará sobre las tasas de interés en México

DURACIÓN: 3 horas

PROCEDIMIENTO GENERAL

1. Cada equipo deberá buscar información sobre las tasas de interés en México, empleando para ello el Internet, la bibliografía y hemerografía especializada
2. Cada equipo tendrá una hora para presentar sus resultados, del cual deberá entregar una copia escrita al profesor

Los aspectos a evaluar a cada equipo será: (cada aspecto equivaldrá a 2 puntos)

1. Profundidad de la investigación efectuada
2. Integración mostrada como equipo
3. Calidad de la presentación y claridad en la exposición de las ideas
4. Precisión en las respuestas a las preguntas efectuadas
5. Validez del análisis efectuado y de las conclusiones y juicios emitidos

**CALIFICACION DE
LA PRÁCTICA**



**FIRMA Y NOMBRE DEL
PROFESOR:**

PARTE II. ANÁLISIS BURSÁTIL DEL MERCADO ACCIONARIO MEXICANO

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, efectuará una investigación sobre el comportamiento de una acción cotizada en la Bolsa Mexicana de Valores

DURACIÓN: 3 horas

PROCEDIMIENTO GENERAL

1. Cada equipo deberá buscar información sobre las fuentes de financiamiento en México, empleando para ello el Internet, la bibliografía y hemerografía especializada, así como la visita a casa de bolsa y a la Bolsa Mexicana de Valores
2. Cada equipo tendrá una hora para presentar sus resultados, del cual deberá entregar una copia escrita al profesor

Los aspectos a evaluar a cada equipo será: (cada aspecto equivaldrá a 2 puntos)

1. Profundidad de la investigación efectuada
2. Integración mostrada como equipo
3. Calidad de la presentación y claridad en la exposición de las ideas
4. Precisión en las respuestas a las preguntas efectuadas
5. Validez del análisis efectuado y de las conclusiones y juicios emitidos

CALIFICACION DE LA PRÁCTICA



FIRMA Y NOMBRE DEL PROFESOR:

PARTE III. SOCIEDADES DE INVERSIÓN

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, investigará sobre la actualidad de las sociedades de inversión en México

DURACIÓN: 3 horas

PROCEDIMIENTO GENERAL

1. Cada equipo deberá buscar información sobre las fuentes de financiamiento en México, empleando para ello el Internet, la bibliografía y hemerografía especializada, así como la visita a las operadoras de sociedades de inversión
2. Cada equipo tendrá una hora para presentar sus resultados, del cual deberá entregar una copia escrita al profesor

Los aspectos a evaluar a cada equipo será: (cada aspecto equivaldrá a 2 puntos)

1. Profundidad de la investigación efectuada
2. Integración mostrada como equipo
3. Calidad de la presentación y claridad en la exposición de las ideas
4. Precisión en las respuestas a las preguntas efectuadas
5. Validez del análisis efectuado y de las conclusiones y juicios emitidos

**CALIFICACION DE
LA PRÁCTICA**

**FIRMA Y NOMBRE DEL
PROFESOR:**

MANUAL DE PRÁCTICAS

Licenciatura en Administración de Empresas
AD486 Práctica Integradora en Finanzas
Área de Formación: Prácticas Profesionales

PRÁCTICA 10 PAGOS EN EL COMERCIO INTERNACIONAL

LUGAR: Salón de clases

DURACIÓN: 6 horas

OBJETIVO: Analizar la estructura de un crédito
documentario y su empleo en el
comercio internacional

INTRODUCCIÓN

Los pagos en el comercio internacional constituyen una actividad altamente importante para la expansión comercial de las empresas

LAS CARTAS DE CRÉDITO EN EL COMERCIO INTERNACIONAL

OBJETIVO:

El estudiante, en el marco de su equipo de trabajo, investigará sobre la utilización de las cartas de crédito en el comercio internacional y la estructura, contenido y procedimiento de las mismas

DURACIÓN: 2 horas

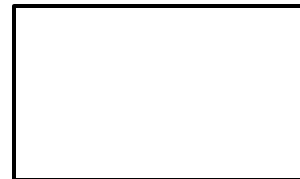
PROCEDIMIENTO GENERAL

1. Cada equipo deberá buscar información sobre las fuentes de financiamiento en México, empleando para ello el Internet, la bibliografía y hemerografía especializada, así como la visita a empresas con operaciones de comercio internacional
2. Cada equipo tendrá una hora para presentar sus resultados, del cual deberá entregar una copia escrita al profesor

Los aspectos a evaluar a cada equipo será: (cada aspecto equivaldrá a 2 puntos)

1. Profundidad de la investigación efectuada
2. Integración mostrada como equipo
3. Calidad de la presentación y claridad en la exposición de las ideas
4. Precisión en las respuestas a las preguntas efectuadas
5. Validez del análisis efectuado y de las conclusiones y juicios emitidos

CALIFICACION DE LA PRÁCTICA



FIRMA Y NOMBRE DEL PROFESOR:

MANUAL DE PRÁCTICAS

Licenciatura en Administración de Empresas
AD486 Práctica Integradora en Finanzas
Área de Formación: Prácticas Profesionales

PRÁCTICA 11 ADMINISTRACIÓN DE RIESGOS

LUGAR: Salón de clases

DURACIÓN: 6 horas

OBJETIVO: Analizar un plan de administración de riesgos de una empresa

INTRODUCCIÓN

Un aspecto importante de la tesorería empresarial lo constituye la correcta y oportuna administración de los riesgos empresariales, especialmente los riesgos financieros

PROCEDIMIENTO GENERAL

1. Cada equipo deberá buscar información sobre las fuentes de financiamiento en México, empleando para ello el Internet, la bibliografía y hemerografía especializada, y la investigación en una empresa concreta que emplee productos derivados para administrar el riesgo
2. Cada equipo tendrá una hora para presentar sus resultados, del cual deberá entregar una copia escrita al profesor

Los aspectos a evaluar a cada equipo será: (cada aspecto equivaldrá a 2 puntos)

1. Profundidad de la investigación efectuada
2. Integración mostrada como equipo
3. Calidad de la presentación y claridad en la exposición de las ideas
4. Precisión en las respuestas a las preguntas efectuadas
5. Validez del análisis efectuado y de las conclusiones y juicios emitidos

CALIFICACION DE LA PRÁCTICA



FIRMA Y NOMBRE DEL
PROFESOR:
