

## SOLUCIÓN EJEMPLOS FINANCIERA 2

### Ejercicio 1

|                                  | 2016             |         | 2015             |         | 2014             |         | 2013             |         | 2012             |
|----------------------------------|------------------|---------|------------------|---------|------------------|---------|------------------|---------|------------------|
| Ingresos de la explotación       | <b>440.000</b>   | 4,76%   | <b>420.000</b>   | 5,00%   | <b>400.000</b>   | -2,44%  | <b>410.000</b>   | 10,81%  | <b>370.000</b>   |
|                                  | 100,00%          | 18,92%  | 100,00%          | 13,51%  | 100,00%          | 8,11%   | 100,00%          | 10,81%  | 100,00%          |
| Gastos de la explotación         | <b>244.000</b>   | 15,91%  | <b>210.500</b>   | 7,51%   | <b>195.800</b>   | -2,34%  | <b>200.500</b>   | 6,42%   | <b>188.400</b>   |
|                                  | 55,45%           | 29,51%  | 50,12%           | 11,73%  | 48,95%           | 3,93%   | 48,90%           | 6,42%   | 50,92%           |
| Aprovisionamientos               | <b>134.000</b>   | 10,74%  | <b>121.000</b>   | 13,08%  | <b>107.000</b>   | -4,46%  | <b>112.000</b>   | 12,00%  | <b>100.000</b>   |
|                                  | 30,45%           | 34,00%  | 28,81%           | 21,00%  | 26,75%           | 7,00%   | 27,32%           | 12,00%  | 27,03%           |
| Gastos de personal               | <b>70.000</b>    | 16,67%  | <b>60.000</b>    | 0,00%   | <b>60.000</b>    | 0,00%   | <b>60.000</b>    | 0,00%   | <b>60.000</b>    |
|                                  | 15,91%           | 16,67%  | 14,29%           | 0,00%   | 15,00%           | 0,00%   | 14,63%           | 0,00%   | 16,22%           |
| Amortización                     | <b>30.000</b>    | 50,00%  | <b>20.000</b>    | 0,00%   | <b>20.000</b>    | 0,00%   | <b>20.000</b>    | 0,00%   | <b>20.000</b>    |
|                                  | 6,82%            | 50,00%  | 4,76%            | 0,00%   | 5,00%            | 0,00%   | 4,88%            | 0,00%   | 5,41%            |
| (Suministros, publicidad...)     | <b>10.000</b>    | 5,26%   | <b>9.500</b>     | 7,95%   | <b>8.800</b>     | 3,53%   | <b>8.500</b>     | 1,19%   | <b>8.400</b>     |
|                                  | 2,27%            | 19,05%  | 2,26%            | 13,10%  | 2,20%            | 4,76%   | 2,07%            | 1,19%   | 2,27%            |
| Beneficio de la explotación      | <b>196.000</b>   | -6,44%  | <b>209.500</b>   | 2,60%   | <b>204.200</b>   | -2,53%  | <b>209.500</b>   | 15,36%  | <b>181.600</b>   |
|                                  | 44,55%           | 7,93%   | 49,88%           | 15,36%  | 51,05%           | 12,44%  | 51,10%           | 15,36%  | 49,08%           |
| + Ingresos financieros           | <b>100</b>       | 100,00% | <b>50</b>        | -37,50% | <b>80</b>        | 14,29%  | <b>70</b>        | -26,32% | <b>95</b>        |
|                                  | 0,02%            | 5,26%   | 0,01%            | -47,37% | 0,02%            | -15,79% | 0,02%            | -26,32% | 0,03%            |
| - Gastos financieros             | <b>2.000</b>     | 5,26%   | <b>1.900</b>     | -17,39% | <b>2.300</b>     | -4,17%  | <b>2.400</b>     | 14,29%  | <b>2.100</b>     |
|                                  | 0,45%            | -4,76%  | 0,45%            | -9,52%  | 0,58%            | 9,52%   | 0,59%            | 14,29%  | 0,57%            |
| Beneficio antes de impuestos     | <b>194.100</b>   | -6,53%  | <b>207.650</b>   | 2,81%   | <b>201.980</b>   | -2,51%  | <b>207.170</b>   | 15,35%  | <b>179.595</b>   |
|                                  | 44,11%           | 8,08%   | 49,44%           | 15,62%  | 50,50%           | 12,46%  | 50,53%           | 15,35%  | 48,54%           |
| - Impuestos                      | <b>48.525</b>    | -6,53%  | <b>51.913</b>    | 2,81%   | <b>50.495</b>    | -2,51%  | <b>51.793</b>    | 15,35%  | <b>44.899</b>    |
|                                  | 11,03%           | 8,08%   | 12,36%           | 15,62%  | 12,62%           | 12,46%  | 12,63%           | 15,35%  | 12,13%           |
| Beneficio Neto                   | <b>145.575</b>   | -6,53%  | <b>155.738</b>   | 2,81%   | <b>151.485</b>   | -2,51%  | <b>155.378</b>   | 15,35%  | <b>134.696</b>   |
|                                  | 33,09%           | 8,08%   | 37,08%           | 15,62%  | 37,87%           | 12,46%  | 37,90%           | 15,35%  | 36,40%           |
| Activo no corriente              | <b>88.000</b>    | -2,22%  | <b>90.000</b>    | -18,18% | <b>110.000</b>   | -15,38% | <b>130.000</b>   | -13,33% | <b>150.000</b>   |
|                                  | 5,87%            | -41,33% | 6,92%            | -40,00% | 9,32%            | -26,67% | 11,93%           | -13,33% | 14,15%           |
| Inmovilizado intangible          | <b>1.000</b>     | -50,00% | <b>2.000</b>     | -33,33% | <b>3.000</b>     | -25,00% | <b>4.000</b>     | -20,00% | <b>5.000</b>     |
|                                  | 0,07%            | -80,00% | 0,15%            | -60,00% | 0,25%            | -40,00% | 0,37%            | -20,00% | 0,47%            |
| Inmovilizado material            | <b>87.000</b>    | -1,14%  | <b>88.000</b>    | -17,76% | <b>107.000</b>   | -15,08% | <b>126.000</b>   | -13,10% | <b>145.000</b>   |
|                                  | 5,81%            | -40,00% | 6,77%            | -39,31% | 9,07%            | -26,21% | 11,56%           | -13,10% | 13,68%           |
| Activo corriente                 | <b>1.410.000</b> | 16,53%  | <b>1.210.000</b> | 13,08%  | <b>1.070.000</b> | 11,46%  | <b>960.000</b>   | 5,49%   | <b>910.000</b>   |
|                                  | 94,13%           | 54,95%  | 93,08%           | 32,97%  | 90,68%           | 17,58%  | 88,07%           | 5,49%   | 85,85%           |
| Existencias                      | <b>880.000</b>   | 10,00%  | <b>800.000</b>   | 6,67%   | <b>750.000</b>   | 4,17%   | <b>720.000</b>   | 20,00%  | <b>600.000</b>   |
|                                  | 58,74%           | 46,67%  | 61,54%           | 33,33%  | 63,56%           | 25,00%  | 66,06%           | 20,00%  | 56,60%           |
| Deudores comerciales             | <b>450.000</b>   | 40,63%  | <b>320.000</b>   | 28,00%  | <b>250.000</b>   | 38,89%  | <b>180.000</b>   | 12,50%  | <b>160.000</b>   |
|                                  | 30,04%           | 181,25% | 24,62%           | 100,00% | 21,19%           | 56,25%  | 16,51%           | 12,50%  | 15,09%           |
| Efectivo                         | <b>80.000</b>    | -11,11% | <b>90.000</b>    | 28,57%  | <b>70.000</b>    | 16,67%  | <b>60.000</b>    | -60,00% | <b>150.000</b>   |
|                                  | 5,34%            | -46,67% | 6,92%            | -40,00% | 5,93%            | -53,33% | 5,50%            | -60,00% | 14,15%           |
| TOTAL ACTIVO                     | <b>1.498.000</b> | 15,23%  | <b>1.300.000</b> | 10,17%  | <b>1.180.000</b> | 8,26%   | <b>1.090.000</b> | 2,83%   | <b>1.060.000</b> |
|                                  | 100,00%          | 41,32%  | 100,00%          | 22,64%  | 100,00%          | 11,32%  | 100,00%          | 2,83%   | 100,00%          |
| Patrimonio Neto                  | <b>235.738</b>   | 1,84%   | <b>231.485</b>   | -1,65%  | <b>235.378</b>   | 9,63%   | <b>214.696</b>   | 6,29%   | <b>202.000</b>   |
|                                  | 15,74%           | 16,70%  | 17,81%           | 14,60%  | 19,95%           | 16,52%  | 19,70%           | 6,29%   | 19,06%           |
| Capital                          | <b>60.000</b>    | 0,00%   | <b>60.000</b>    | 0,00%   | <b>60.000</b>    | 0,00%   | <b>60.000</b>    | 0,00%   | <b>60.000</b>    |
|                                  | 4,01%            | 0,00%   | 4,62%            | 0,00%   | 5,08%            | 0,00%   | 5,50%            | 0,00%   | 5,66%            |
| Reservas                         | <b>20.000</b>    | 0,00%   | <b>20.000</b>    | 0,00%   | <b>20.000</b>    | 0,00%   | <b>20.000</b>    | 0,00%   | <b>20.000</b>    |
|                                  | 1,34%            | 0,00%   | 1,54%            | 0,00%   | 1,69%            | 0,00%   | 1,83%            | 0,00%   | 1,89%            |
| Resultados ejercicios anteriores | <b>155.738</b>   | 2,81%   | <b>151.485</b>   | -2,51%  | <b>155.378</b>   | 15,35%  | <b>134.696</b>   | 10,41%  | <b>122.000</b>   |
|                                  | 10,40%           | 27,65%  | 11,65%           | 24,17%  | 13,17%           | 27,36%  | 12,36%           | 10,41%  | 11,51%           |

|  |                  |         |                  |         |                  |         |                  |         |                  |
|--|------------------|---------|------------------|---------|------------------|---------|------------------|---------|------------------|
| <b>Pasivo no corriente</b>                     | <b>330.000</b>   | -17,50% | <b>400.000</b>   | -11,11% | <b>450.000</b>   | -10,00% | <b>500.000</b>   | -9,09%  | <b>550.000</b>   |
|  | 22,03%           | -40,00% | 30,77%           | -27,27% | 38,14%           | -18,18% | 45,87%           | -9,09%  | 51,89%           |
| Deudas a L/P                                   | <b>330.000</b>   | -17,50% | <b>400.000</b>   | -11,11% | <b>450.000</b>   | -10,00% | <b>500.000</b>   | -9,09%  | <b>550.000</b>   |
|  | 22,03%           | -40,00% | 30,77%           | -27,27% | 38,14%           | -18,18% | 45,87%           | -9,09%  | 51,89%           |
| <b>Pasivo corriente</b>                        | <b>932.262</b>   | 39,45%  | <b>668.515</b>   | 35,16%  | <b>494.622</b>   | 31,79%  | <b>375.304</b>   | 21,85%  | <b>308.000</b>   |
|  | 62,23%           | 202,68% | 51,42%           | 117,05% | 41,92%           | 60,59%  | 34,43%           | 21,85%  | 29,06%           |
| Deudas a C/P                                   | <b>770.000</b>   | 24,19%  | <b>620.000</b>   | 47,62%  | <b>420.000</b>   | 40,00%  | <b>300.000</b>   | 42,86%  | <b>210.000</b>   |
|  | 51,40%           | 266,67% | 47,69%           | 195,24% | 35,59%           | 100,00% | 27,52%           | 42,86%  | 19,81%           |
| Acreedores comerciales y otras cuentas a pagar | <b>162.262</b>   | 234,46% | <b>48.515</b>    | -34,99% | <b>74.622</b>    | -0,91%  | <b>75.304</b>    | -23,16% | <b>98.000</b>    |
|  | 10,83%           | 65,57%  | 3,73%            | -50,49% | 6,32%            | -23,86% | 6,91%            | -23,16% | 9,25%            |
| <b>TOTAL PASIVO + PN</b>                       | <b>1.498.000</b> | 15,23%  | <b>1.300.000</b> | 10,17%  | <b>1.180.000</b> | 8,26%   | <b>1.090.000</b> | 2,83%   | <b>1.060.000</b> |
|  | 100,00%          | 41,32%  | 100,00%          | 22,64%  | 100,00%          | 11,32%  | 100,00%          | 2,83%   | 100,00%          |

|                            | 2016      | 2015      |
|----------------------------|-----------|-----------|
| ROA                        | 0,14      | 0,17      |
| ROE                        | 0,62      | 0,67      |
| Vtas/Gtos personal         | 6,29      | 7,00      |
| Ventas por trabajador      | 90.000 €  | 105.000 € |
| Ratio de solvencia         | 1,49      | 1,81      |
| Fondo de maniobra          | 467.738 € | 541.485 € |
| Ratio de endeudamiento     | 5,57      | 4,62      |
| Ratio de endeudamiento C/P | 4,08      | 2,89      |
| Ratio de endeudamiento L/P | 1,48      | 1,73      |
| Calidad de la deuda        | 0,73      | 0,63      |

## Ejercicio 2

### Criterio de flujo de caja total por unidad monetaria comprometida:

$$\frac{30.000 + 40.000 + 50.000 + 60.000 + 70.000 + 70.000 \text{ (valor residual del inmovilizado)}}{150.000 \text{ (Inversión inicial)}} = 2,13$$

Los flujos netos de caja se calculan como Ingresos – gastos (Ej. Año 2018 70.000 – 40.000 = 30.000)

### Pay Back:

Como los Flujos Netos de Caja no son constantes tendremos que ir sumando parte por parte, hasta que lleguemos a completar los 150.000 de la inversión inicial. Así:

30.000 + 40.000 + 50.000 = 120.000, por lo tanto, el Pay Back serán tres años y algo más.

Como quedarían por “amortizar” 30.000 euros y en el cuarto año se calcula un flujo de caja de 60.000. Tendremos que añadir otro medio año. Por lo tanto, el Pay Back será de 3 años y medio (6 meses).

### VAN

$$VAN = -150.000 + \frac{30.000}{1,05} + \frac{40.000}{1,05^2} + \frac{50.000}{1,05^3} + \frac{60.000}{1,05^4} + \frac{70.000+70.000}{1,05^5} = 117.100,30 \text{ euros}$$