

OBSERVATIONS  
ON  
REVERSIONARY PAYMENTS;  
ON  
SCHEMES for providing ANNUITIES  
for WIDOWS, and for Persons in OLD AGE;  
ON  
The METHOD of Calculating the VALUES  
of ASSURANCES ON LIVES;  
AND ON  
THE NATIONAL DEBT,

To which are added,

FOUR ESSAYS  
On different Subjects in the Doctrine of LIFE  
ANNUITIES and POLITICAL ARITHMETICK.

ALSO,

AN APPENDIX,  
Containing a complete Set of TABLES; particularly,  
Four New Tables, shewing the Probabilities of Life in  
LONDON, NORWICH, and NORTHAMPTON; and the  
Values of *joint* Lives.

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BY RICHARD PRICE, D.D. F.R.S.

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## OBSERVATIONS

ON

TABLES I. and II.

**DIRECTIONS** for finding the **VALUES** of **TWO JOINT LIVES** of given Ages, by **TABLE VII.**

FINIS

Este livro mostra, a partir da leitura do seu ÍNDICE ( APPENDIX ) que o Sr. Price, como matemático ( e Atuário ), estudou em profundidade, as probabilidades de vida de diversas cidades [ probabilidades de nascimento ; de morte ; idades de nascimento ; no casamento, diferenças de idades entre o homem e a mulher ; tempo de viuvez ( survivalships )].

Pelo texto, utilizou as Tábuas Financeiras I -  $\frac{1}{(1+i)^n}$  - IV dos nossos livros e II -  $\frac{(1+i)^n - 1}{i(1+i)^n}$  -

V dos nossos livros ; ambas calculam o Valor Presente para, a partir delas, calcular o Valor Futuro e o Valor da Contribuição dos Participantes.

Resumindo : ( no nosso pensamento )

$$1- PV = FV \cdot \frac{1}{(1+i)^n} \therefore FV = PV \cdot (1+i)^n \rightarrow \text{Montante} - \text{Pecúlio}$$

└────────── Tábuas I

$$2- FV = \frac{(1+i)^n - 1}{i(1+i)^n} \cdot (1+i)^n = FV = \frac{(1+i)^n - 1}{i} \rightarrow \text{Montante} - \text{Renda Certa}$$

└────────── Tábuas II



$$FV = pmt \cdot \frac{(1+i)^n - 1}{i}$$

i  
 Tábua II dos nossos livros  
 Valor de Contribuição

de onde calculamos :

$$3- pmt = FV \cdot \frac{i}{(1+i)^n - 1}$$

(1+i)<sup>n</sup> - 1  
 Tábua VI dos nossos livros  
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### Tabelas Price :

Denominar as 4 Tábuas utilizadas pelo Sr. Price, incluídas na sua 4ª edição, de Tabela Price, como afirmam Professores, Autores e Outros é impróprio, porque o Sr. Price não criou ( desenvolveu ) estas 4 Tábuas Financeiras. Elas já existiam. O próprio Sr. Price afirma que estas Tábuas Financeiras já existiam – Ver, neste ÍNDICE, as fl's. 334 a 341.

### Sistema Francês de Amortização :

Em nenhum dos itens deste ÍNDICE faz qualquer menção sobre a Modalidade Quatro de Pagamentos ( Amortizações ) de Empréstimos e Financiamentos em parcelas iguais, mensais e sucessivas e conhecida como **Sistema Francês de Amortização que utiliza a Tábua III** –  $\frac{i(1+i)^n}{(1+i)^n - 1}$  dos nossos livros para calcular o Valor da Prestação.

### Verdades Históricas que Precisam ser Removidas :

Pela leitura deste ÍNDICE temos que rever duas “ verdades históricas ” difundidas, aqui no Brasil, por Autores, Professores, Articulistas e Outros :

- **Que o Sr. Richard Price criou as Tabelas de Juro Composto. Elas já existiam desde o século XVII.**
- **Que o Sr. Richard Price desenvolveu o Sistema Francês de Amortização.**

Diz os Autores, Professores : Referência 10 do livro Matemática Financeira nos Tribunais de Justiça

*“ ... preocupados com posições equivocadas assumidas por pessoas e entidades, frequentemente divulgada pela imprensa ou contidos em Laudos Periciais envolvendo cálculos financeiros, declaramos que a fórmula utilizada para o cálculo das prestações, nos casos de empréstimos ou financiamentos em parcelas iguais de aplicação generalizada no mundo, e que no Brasil é também conhecida como Tabela Price ou Sistema Francês de Amortização ... ”*

O Autor Thales Mello Carvalho – falecido em 1961, em seu livro afirma : **as tabelas de amortização de empréstimos pelo Sistema Francês ( vulgar e erroneamente denominadas Tabela Price )**.

