School Calendar

Why is it important to maintain the consistent 52 weeks per year?

The consistent structure of 52 weeks per year and 13 weeks per quarter of *WEcalendar* can facilitate many annual planning. For example, school terms can be easily determined once and repeatedly applicable for every year. Here is a preferable school-term arrangement. We may have four school terms with 10 study weeks in each quarter. The term breaks are five weeks and one week in alternation. Then, students can enjoy two long school holidays during the study year with one in the summer and another in the winter.

Weeks (Two *long school term breaks per year*)

Quarter		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Jan. to March	*3*	*4*	*5*	T	E	R	M		O	N	E		
2	April to June		T	E	R	M		T	W	O			*1*	*2*
3	July to Sep.	*3*	*4*	*5*	T	E	R	M		T	H	R	E	E
4	October to Dec.		T	E	R	M		F	O	U	R		*1*	*2*

In New Zealand, there are three 2-week short-term breaks in order to reserve a six-week long break in the summer annually. The simple arrangement can be as follows:

Weeks (An annual six-week school term break in New Zealand)

Quarter		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Jan. to March	*3*	*4*	*5*	*6*	T	E	R	M		0	N	E	
2	April to June				T	E	R	M		T	W	O		
3	July to Sep.			T	E	R	M		T	H	R	E	E	
4	October to Dec.		T	E	R	M		F	O	U	R		*1*	*2*

Once the school calendar is ready, it is reusable every year. The same schedule and study plan can be applicable to the subsequent years with minor adjustments.

"The simple and consistent calendar structure can simplify many and major annual schedules."

Weekly Interest Rate

Will the Long Week concept affect the weekly interest rate?

The *Long Week* concept may affect some week-based business applications, but the impact is mostly positive. Let us examine the impact of the weekly interest rate as an example. For finance and accounting, the monthly and weekly interest rates are devised from the annual interest rate. While the monthly interest rate is generally one-twelfth of the annual interest rate, the weekly interest rate is the direct division of the annual interest rate by 52.

For the monthly interest rate, the sum of the monthly interest rates of the whole year is certainly equal to the annual interest rate, although the days in the months are difference. However, the sum of the weekly interest rates of the whole year is a bit more than the annual interest rate, because a year has 52 weeks and 1 day (365 days) in the common year and it has 52 weeks and 2 days (366 days) in the leap year.

WEcalendar has exactly 52 full weeks per year, in which there has 1 *Long Week* in the common year and 2 *Long Weeks* in the leap year. By adopting the same formula of 1/52 of the annual interest rate, the sum of the weekly interest rates of the whole year is certainly equal to the annual interest rate. Obviously, the case is exactly equivalent to the monthly interest rate.

Moreover, if the 8-day adjustment (i.e. the normal weekly rate x 8 ÷ 7) is applied, the result will be exactly equal to the calculation based on the current Gregorian calendar. The table shown in the below takes an example of the annual interest rate of 5.2% to illustrate the explained computation. In conclusion, *WEcalendar* can offer the compatible and simpler solutions to the similar business applications of the weekly interest rate.

If the annual interest rate is 5.2%	Weekly Interest Rate in the normal week	Weekly Interest Rate in the *Long Week*	Sum of the weekly rates in the common year	Sum of the Weekly rates in the leap year
Based on the current calendar	5.2% ÷ 52		0.1% x (52+1/7)	0.1% x (52+2/7)
	0.10%		5.2143%	5.2286%
Based on the *WEcalendar*	5.2% ÷ 52	5.2% ÷ 52	0.1% x 52	0.1% x 52
	0.10%	0.10%	5.20%	5.20%
Based on the *WEcalendar* with 8-day adjustment	5.2% ÷ 52	0.1% x 8 ÷ 7	0.1% x 51 + 0.1143% x 1	0.1% x 50 + 0.1143% x 2
	0.10%	0.1143%	5.2143%	5.2286%

"Because of the consistent weeks in the WEcalendar, those week-based computations will be simpler and more relevant."

Statistical Precision & Relevancy

How does WEcalendar offer the long-term economic benefits?

For countries and businesses, the financial budgets highly depend on periodic statistics, such as monthly or quarterly. However, due to the inconsistent patterns of weeks in the months, quarters, and years, the variations of weeks actually weaken the precision and relevancy of those statistics. That also certainly affects the forecasts and causes expensive budgets. It is often to spend extra cost and effort to adjust the data in order to reduce the impact of the variations on the statistics. Yet the adjustments are different case by case because every year is different. The followings summarize the variations of months, quarters, and years:

- A month may have 20 to 23 weekdays, 4 to 5 Saturdays, and 4 to 5 Sundays.
- A quarter may have 64 to 65 weekdays, 12 to 14 Saturdays, and 12 to 14 Sundays.
- A year may have 260 to 262 weekdays, 52 to 53 Saturdays, and 52 to 53 Sundays.

WEcalendar ensures consistent 13 full weeks per quarter and 52 weeks per year, so that the periodic statistics can be more precise and relevant without any adjustments. That can save much time and effort. Moreover, the statistical forecasts and budgets are trusted to be more relevant and appropriate. The consistent structures of *WEcalendar* are as follows:

- The same months in any year are identical in both dates and weeks.
- All quarters have consistent 65 weekdays, 13 Saturdays, and 13 regular Sundays. The consistent 78 (or 26 x 3) non-Sundays per quarter are suitable for many applications that require equal 26 days of non-Sundays around a month.
- All years have consistent 260 weekdays, 52 Saturdays, 52 Sundays, plus 1 special Sunday for the New Year's Eve & 1 special Sunday for the Leap Day in the leap year.
- A year is easily divisible into 13 cycles of 4 weeks for some accounting applications.

Furthermore, the weeks of the Gregorian calendar are varying and sometimes across two quarters and two years. That actually introduces more troubles for week-based statistics. Comparatively, the arrangement of weeks in *WEcalendar* is very clear, simple, and actually constant. The weeks are never across quarters and years. Thus, the week-based statistics based on *WEcalendar* are practically more precise, relevant and useful. It also eliminates the need of any uneven week adjustments. Strong statistical precision and relevancy means better forecast of demands and better budgeting of resource, which positively have long-term financial savings and economic gains.

"With stronger & better statistical precision & relevancy,
we can enjoy long-term financial savings and economic gains."