Preliminary Information

The seven scale-degrees of a major or (harmonic or melodic[31]) minor scale together with the (primary and secondary) chords they form are *diatonic* scale-degrees and chords. All these chords depend on and are directly related to the *tonic triad*.

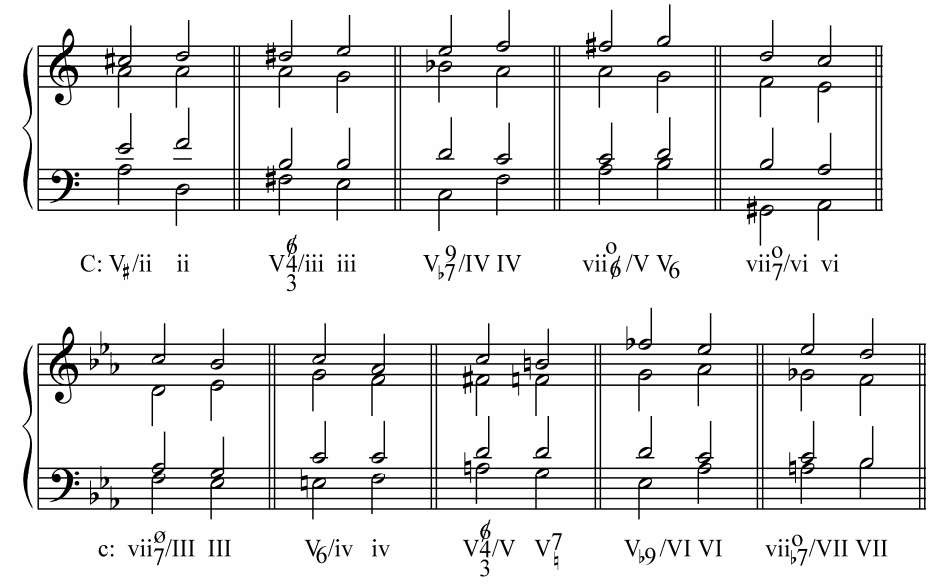
If a diatonic scale-degree is altered by an accidental, it becomes a *chromatic* scale-degree. Chromaticism can be both functional and nonfunctional. If the chromatic note is a part of a chord, such chromaticism is *functional*. If the chromatic note is used as a nonchord tone, such chromaticism is *nonfunctional*. The chords which contain (a) chromatic scale-degree(s) are called *chromatic* (or *altered*) chords.

When used within a diatonic system, the chromatic (altered) chords add new tensions, more variety to the choice of chords and new possibilities for expression in music. Like diatonic chords, chromatic chords also depend on the center of a key, the tonic triad, but not *directly* like the diatonic ones.

The chords, which function like *dominants* to diatonic triads, are the most common among all chromatic chords in tonal music. These are called *secondary (applied or borrowed) dominants*.

Secondary Dominants

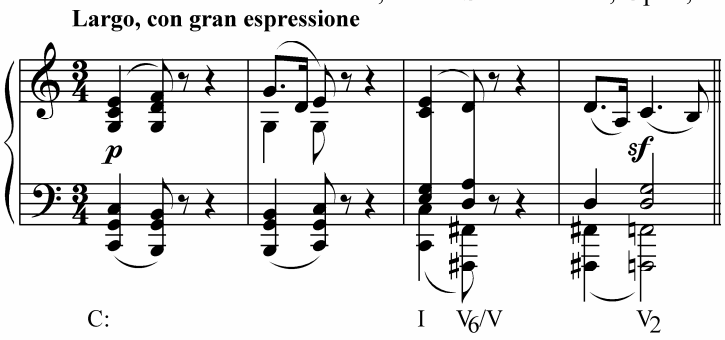
Just as the tonic triad is often preceded by its dominant function chords, any major or minor diatonic triad (ii, iii, IV, V and vi) can be preceded by its own dominant chord[32].



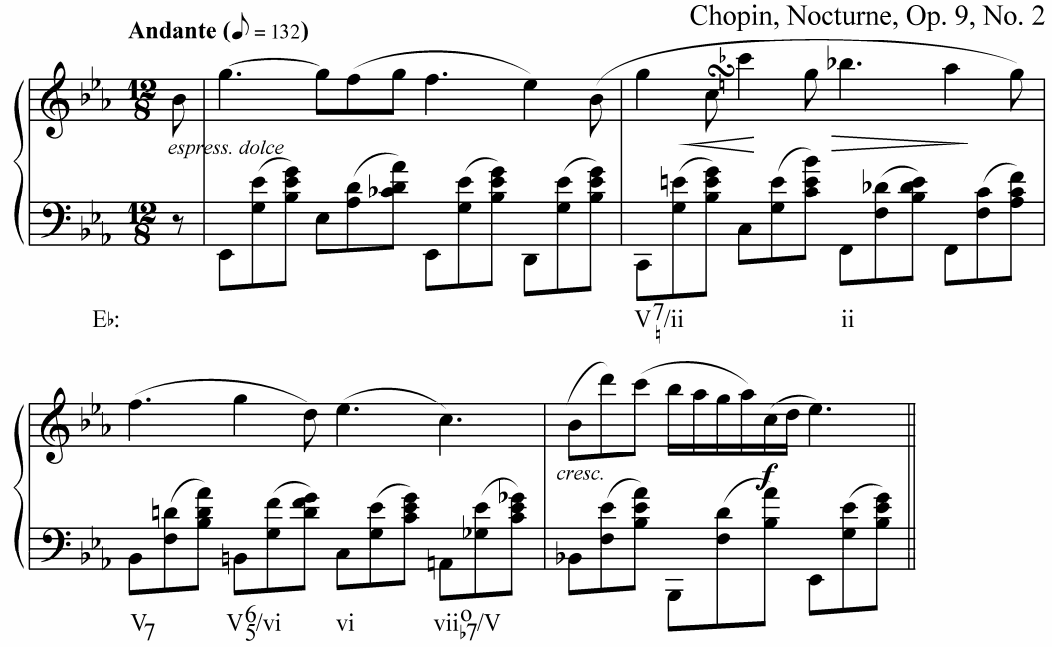
[31] Though the presence of accidentals (naturals or sharps (double sharps)) in harmonic and melodic minor scales makes them look like scales with chromaticism, the raised forms of the 6th and 7th scale-degrees and the scales themselves are considered *diatonic*.

[32] Since diminished triads are unstable chords and, thus, can't function as *temporary tonic triads*, the *leading tone triad* of both *major* and *minor* keys and the *supertonic triad* of a minor key can't have their own secondary dominants (or/and subdominants).

Beethoven, Piano Sonata No. 4, Op. 7, II



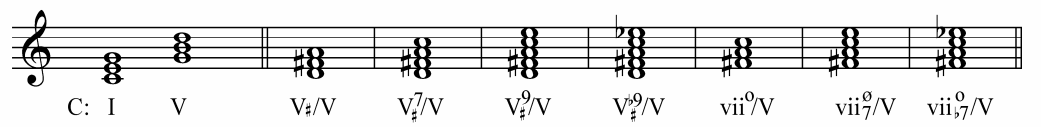
Chopin, Nocturne, Op. 9, No. 2



The chords with the dominant function are:

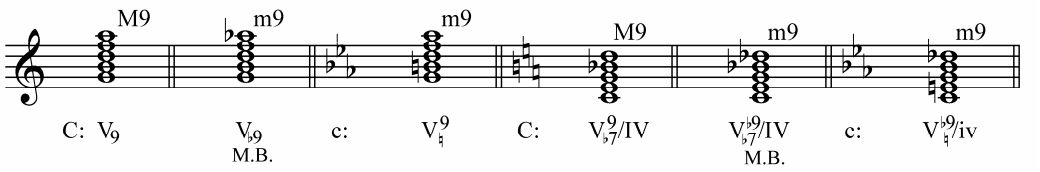
a) the dominant triad (V);
b) the dominant seventh chord (V_7);
c) the dominant ninth chord (V_9) with both major and minor 9th;
d) the leading tone triad (vii^o); and
e) the leading tone seventh chord both fully diminished (vii^o7) and half diminished ($vii^{ø}7$).

All these chords can function as secondary dominants. For example, if one takes the dominant triad (V) and thinks of it as a temporary tonic triad, it can have the following secondary dominant chords.

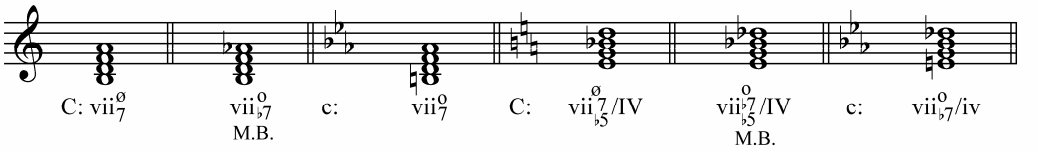


Secondary dominants of V are analyzed V/V (read "V of V"), V_7/V, V_9/V, vii^o/V, $vii^o{}_7$/V or $vii^{ø}{}_7$/V.

Most secondary dominants used in minor keys are structurally identical to those in major keys. The V_9 can be with a major 9th or minor 9th (modal borrowing) in a major key but it can be only with a minor 9th in a minor key. Thus, the *secondary* V_9 with a major 9th or minor 9th can be used with major triads while the secondary V_9 with a minor 9th can be used with minor triads only.

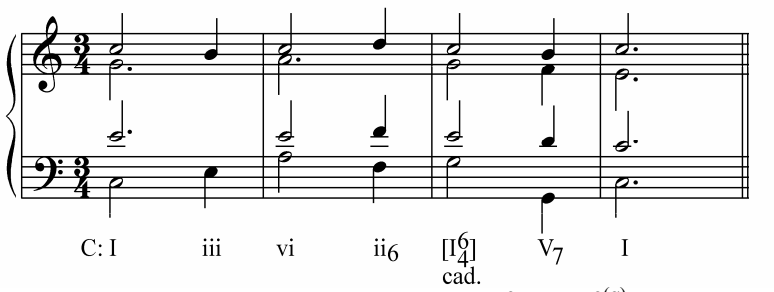


Similarly, the leading tone seventh chord can be both half diminished (vii$^{ø}{}_{7}$) or fully diminished (vii$^{o}{}_{7}$, modal borrowing) in a major key but it can be only fully diminished (vii$^{o}{}_{7}$) in a minor key. Both *secondary* vii$^{ø}{}_{7}$ and vii$^{o}{}_{7}$ can be used with major triads while the *secondary* vii$^{o}{}_{7}$ can be used with minor triads only.

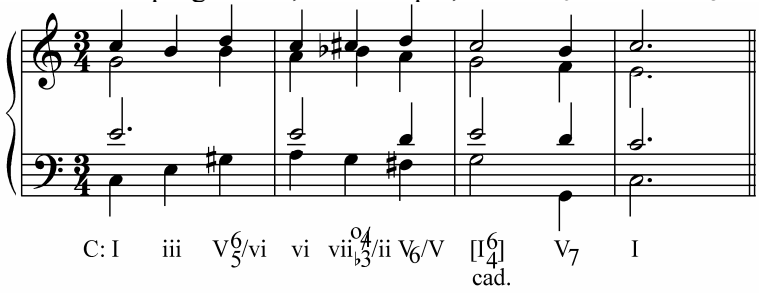


Placement and use

A secondary dominant chord is usually used before and resolves to its expected chord of resolution, i.e., its temporary tonic (which can be a triad, seventh chord or, rarely, ninth chord). A secondary dominant chord can be placed after practically any chord. For example, if there is the following diatonic chord progression I–iii–vi–ii$_6$–[I$^6{}_4$]–V$_7$–I,



any secondary dominant (V, V$_7$, V$_9$, vii^{o} or vii $^{o(ø)}{}_{7}$) may be placed before any of the diatonic chords of the progression, for example, I–iii–V$^6{}_5$/vi–vi–vii$^{o4}{}_3$/ii–V$_6$/V–[I$^6{}_4$]–V$_7$–I.

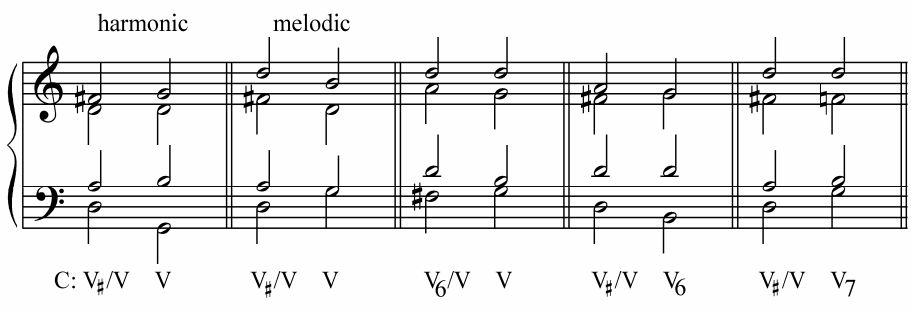


A secondary dominant of V, which was one of the first secondary dominants to be used in classical music, can be also followed by the cadential I$^6{}_4$.

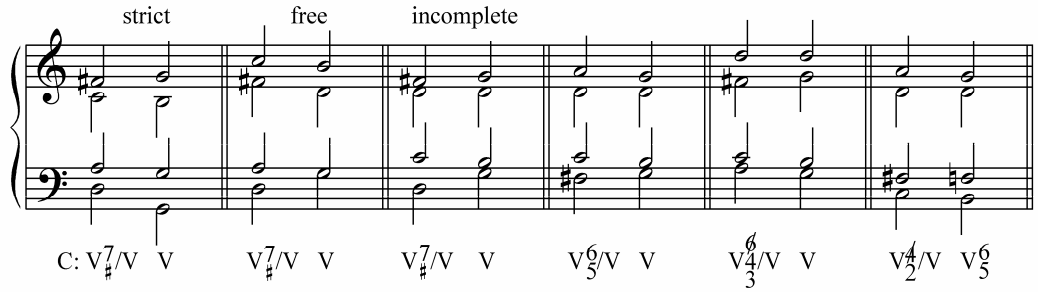
Voice Leading

Secondary dominant chords use the same doubling as diatonic dominants. When connecting secondary dominants with their temporary (secondary) tonic triads, one should follow the voice-leading procedures normal to those diatonic dominants.

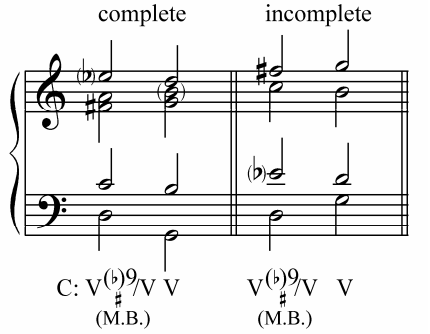
Secondary dominant triad (V) resolution



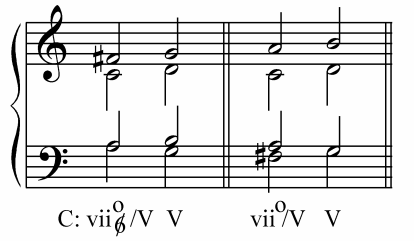
Secondary dominant seventh chord (V_7) resolution



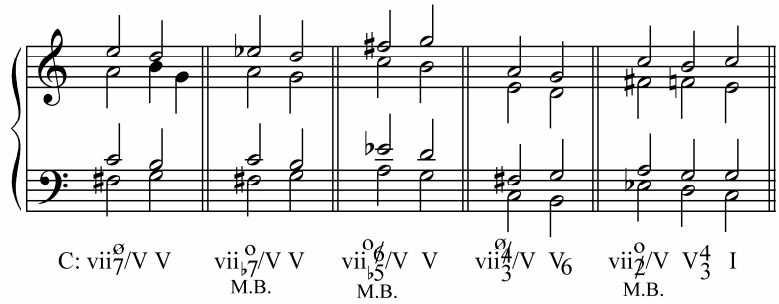
Secondary dominant ninth chord (V_9) resolution



Secondary leading tone triad (vii^o) resolution

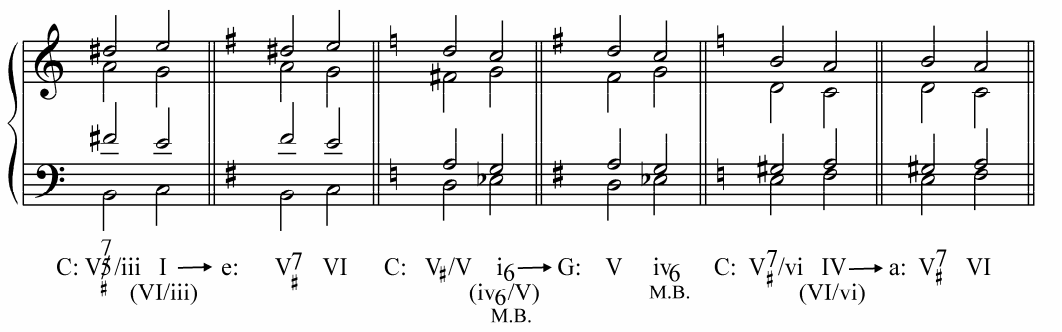


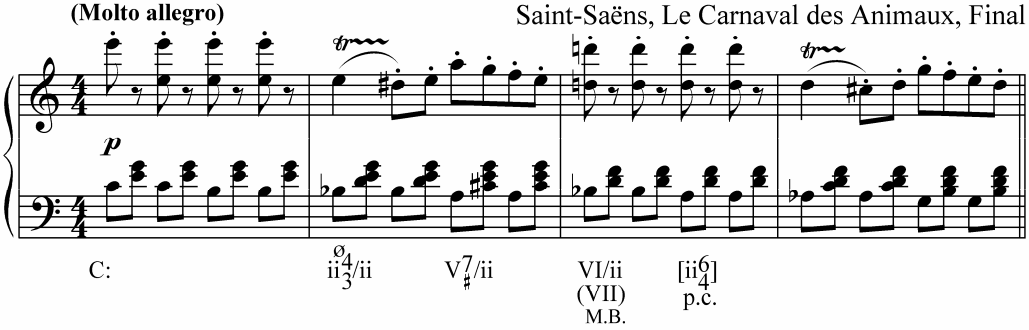
Secondary leading tone seventh chord ($vii^{o(ø)_7}$) resolution



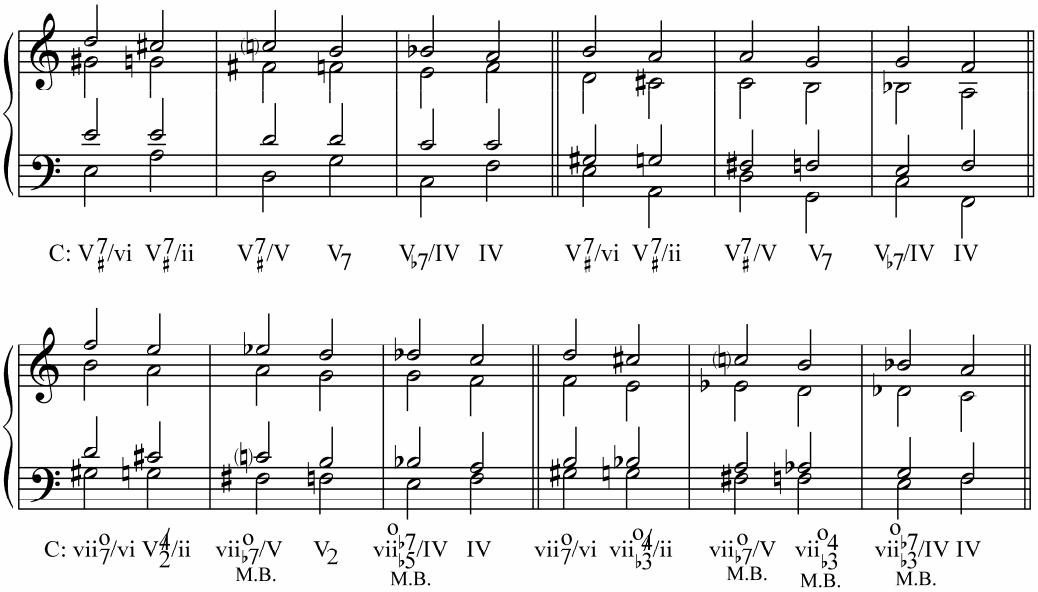
Special Use

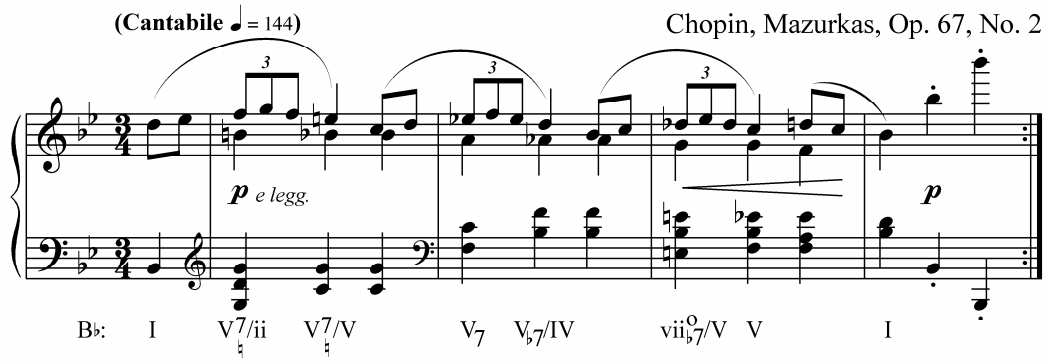
Similar to a deceptive resolution of dominant chords (V–vi, V_7–IV_6), a secondary dominant may also resolve *deceptively*.





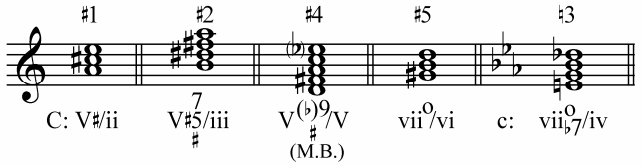
A secondary dominant may proceed to another secondary dominant, often as part of the circle of fifths. For example, V/ii may be followed by V/V since the root of the expected ii is the same as the root of V/V. If a secondary dominant seventh chord in root position resolves to another secondary dominant seventh chord in root position, one of the chords must be incomplete; otherwise parallel 5th's occur. No parallel 5th's occur when one secondary dominant in one inversion proceeds to another in a different inversion.



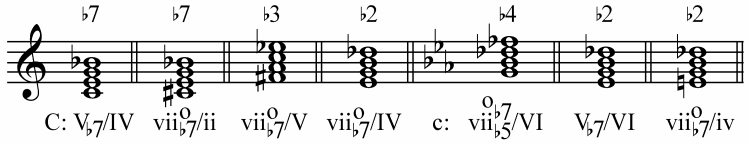


When harmonizing a soprano or bass line, accidentals may hint on where a secondary dominant can be used. Depending on how the accidental alters the diatonic note (by step up or down), a certain secondary dominant chord can be used.

1) If the diatonic note is chromatically *raised*, it becomes the leading tone to the note a step above it and it is usually the *3rd* of the secondary V, V_7 or V_9 or the *root* of vii° or vii$^{o(ø)}{}_7$[33].



2) If the diatonic note is chromatically *lowered*, this can be the *7th* of either V_7 or vii°$_7$.



Since all dominant chords always have the following intervallic structure, it can be helpful in finding and spelling a secondary dominant chord if one remembers the structure of each dominant chord.

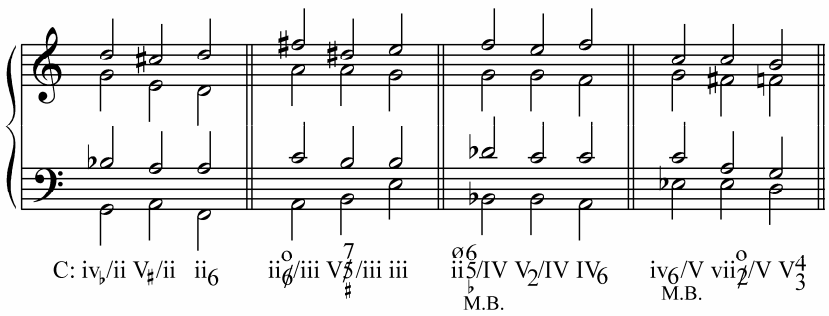
V	V_7	V_9	vii°	vii$^{ø}{}_7$ (vii°$_7$)
		M3 (m3)		M3 (m3)
	m3	m3	m3	m3
m3	m3	m3	m3	m3
M3	M3	M3		

For example, when finding V/ii in C major, one first should find the root of V/ii, which is a P4 below (or a P5 above) the root of its secondary tonic (ii), which would be the note A. Knowing that a dominant triad contains M3 and m3, the 3rd and the 5th of the chord can be now easily found (C-sharp and E respectively).

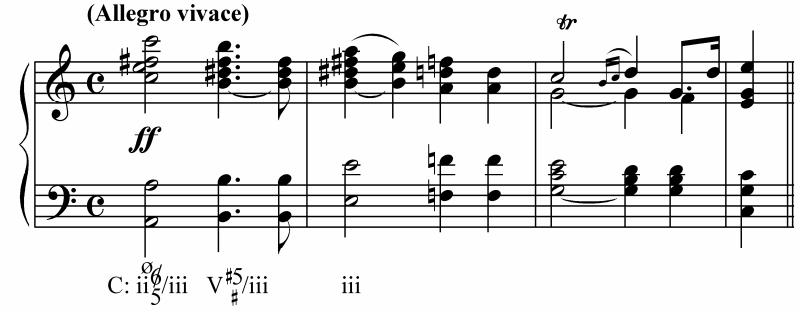
Secondary Subdominants

Like a secondary dominant may be used before its secondary tonic, a *secondary subdominant* may be sometimes used too. Similar to secondary dominants, the chords IV, ii, ii$_7$, their inversions and, sometimes, vi can function as secondary subdominants. They can be directly connected with their secondary tonics but are often used right before a secondary dominant producing a longer *secondary* chord progression.

[33] Note that in a major key the raised 6th scale-degree can't be used as a chord tone of a secondary dominant since it tends to move to the leading tone on which no diatonic major or minor triad can be built.



Mendelssohn, A Midsummer Night's Dream, Op. 61, Wedding March



Exercises

1. Spell the following chords in A major and E-flat major in root position; use treble clef and key signatures: V/ii, V_7/iii, V_9/IV, vii°/V, vii^{o}_{7}/vi, iv/ii and $ii^{ø}_{7}$/iii.

2. Spell the following chords in B minor and C minor in root position; use treble clef and key signatures: V/III, V_7/iv, V_9/V, vii°/VI, $vii^{ø}_{7}$/VII, iv/iv and ii_7/VI.

3. Identify the following secondary dominants using Roman numerals and figured-bass symbols and resolve them correctly.